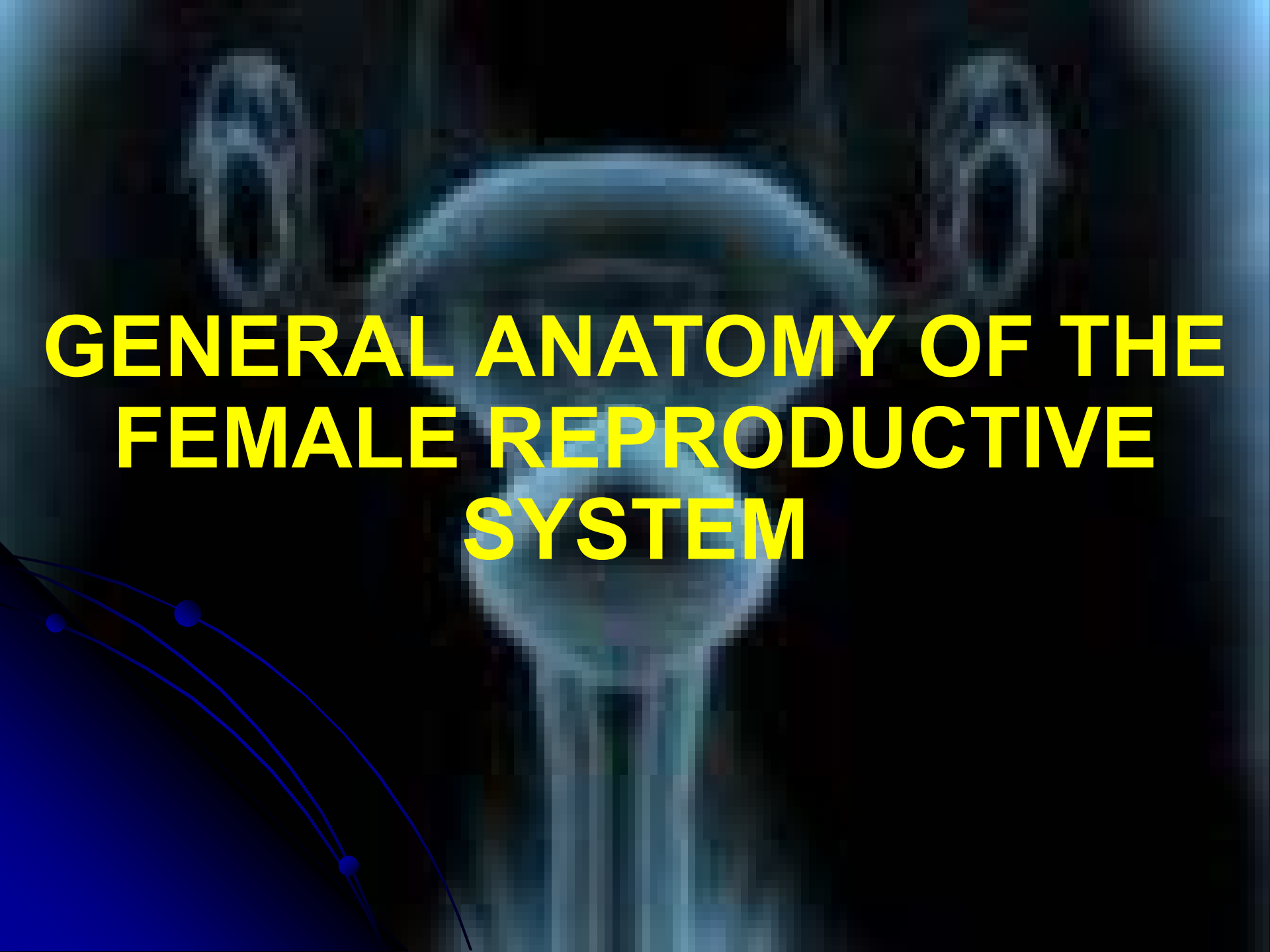

GENERAL ANATOMY OF THE FEMALE REPRODUCTIVE SYSTEM

XXX тысячелетие до н.э. | IV–III тысячелетия до н.э. | IV в. до н.э. | III в. до н.э. | II в. до н.э. | II–I вв. до н.э.

I в. до н.э. | IV–V вв. | ок. 1360 | XIV в. | 1470–1480

Марс и Венера, дом Марса и Венеры в Помпеях, фреска Неаполь, Национальный археологический музей

Архитектурный фрагмент с Венерой, выходящей из моря Каир, Коптский музей

Венера и шесть легендарных воздыхателей, флорентийское блюдо, фрагмент Париж, Лувр

Видение великой блудницы (*Апокалипсис*, 17), шпалера *Апокалипсиса* Анжер, замок короля Рене

Неизвестный нижнерейнский художник, *Магия любви* Лейпциг, Музей изобразительных искусств

The notion of feminine beauty is constantly changing

ок. 1482

Сандро Боттичелли,
Рождение Венеры
Флоренция,
Галерея Уффици

1506

Лукас Кранах,
Венера и Амур с сотами
Рим, Галерея Боргезе

1509

Джорджоне,
Спящая Венера
Дрезден,
Картинная галерея

1538

Тициан,
Венера Урбинская
Флоренция,
Галерея Уффици

1545

Аньоло Бронзино,
Аллегория с Венерой и Амуром
Лондон, Национальная галерея

1630

Петер Пауль Рубенс,
Портрет Елены Фоурмен (Шубка)
Вена, Музей истории искусства

1650

Диего Веласкес,
Венера перед зеркалом
Лондон,
Национальная галерея

Naked Maja, 1797-1800 by Francisco Goya

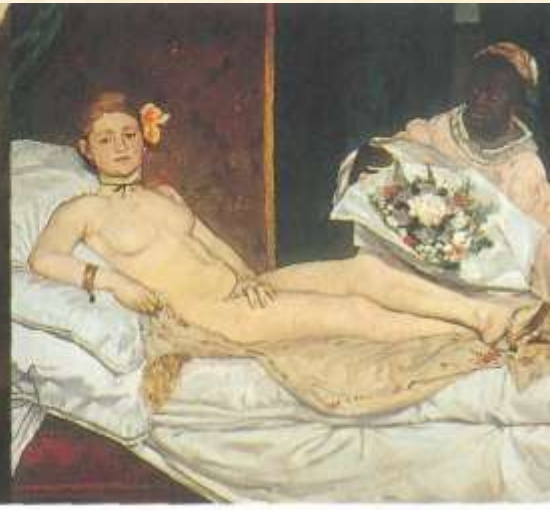
Antonio Canova
Paolina Borghese (1805-1808)
Gallery Borghese, Rome

1814

Жан-Огюст-Доминик Энгр,
Большая одалиска
Париж, Лувр

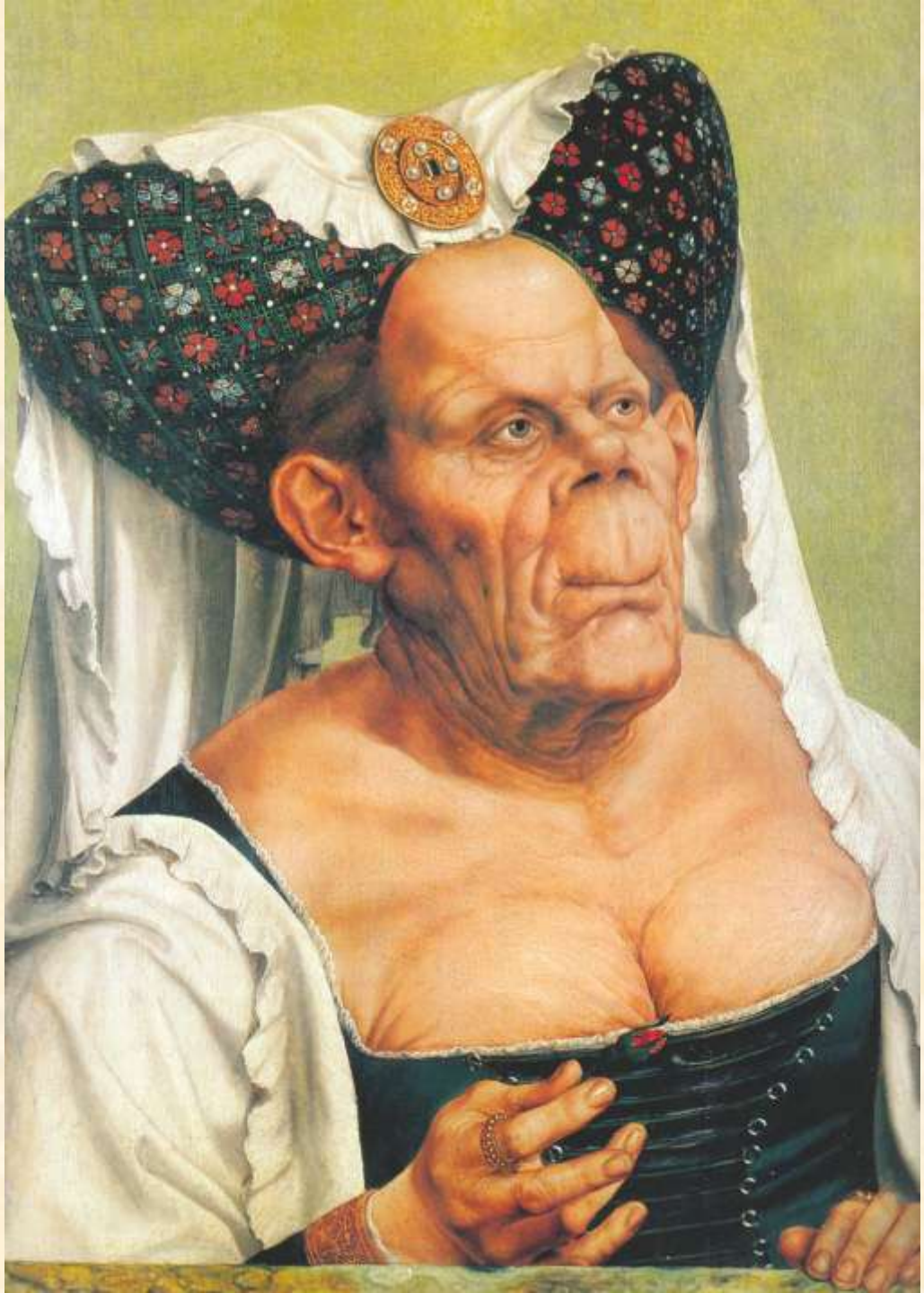
1833

Франческо Хайец,
Кающаяся Мария Магдалина
Милан, Городская галерея
современного искусства



1863

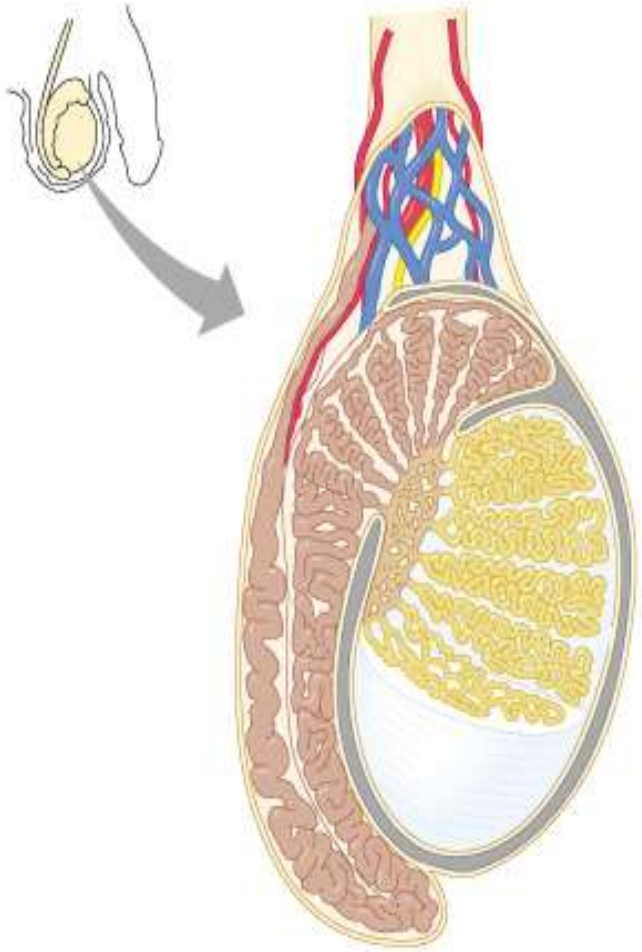
Эдуард Мане,
Олимпия
Париж, Орсе



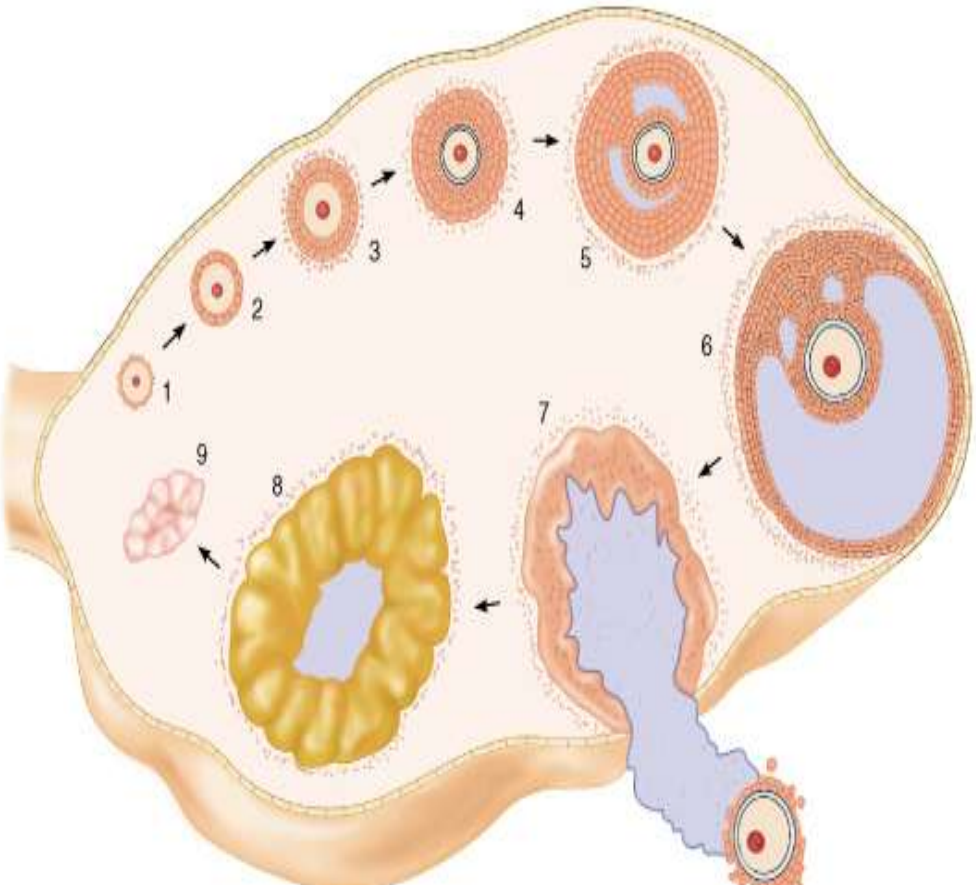
MAY BE AND IS

THE FEMALE REPRODUCTIVE SYSTEM INCLUDES THE PRIMARY ORGANS NECESSARY FOR REPRODUCTION - OVARIES AND THE TESTES, BUT THERE ARE ACCESSORY ORGANS AS WELL.

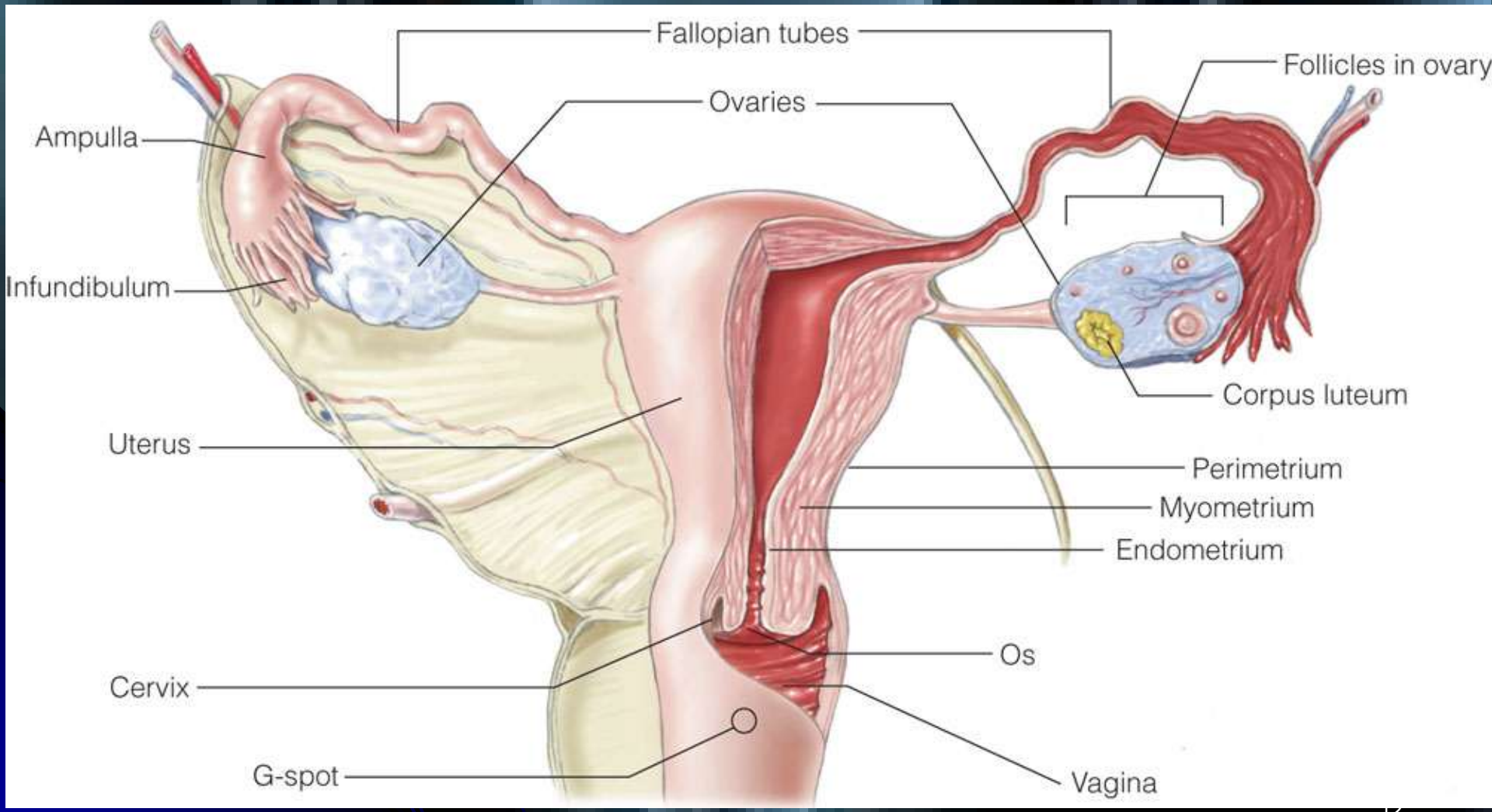
- The reproductive system becomes active after puberty period.
- During puberty the reproductive organs mature to create a fertile individual capable of reproducing. The primary sex organs produce the sex cells (egg/sperm) and sex hormones.



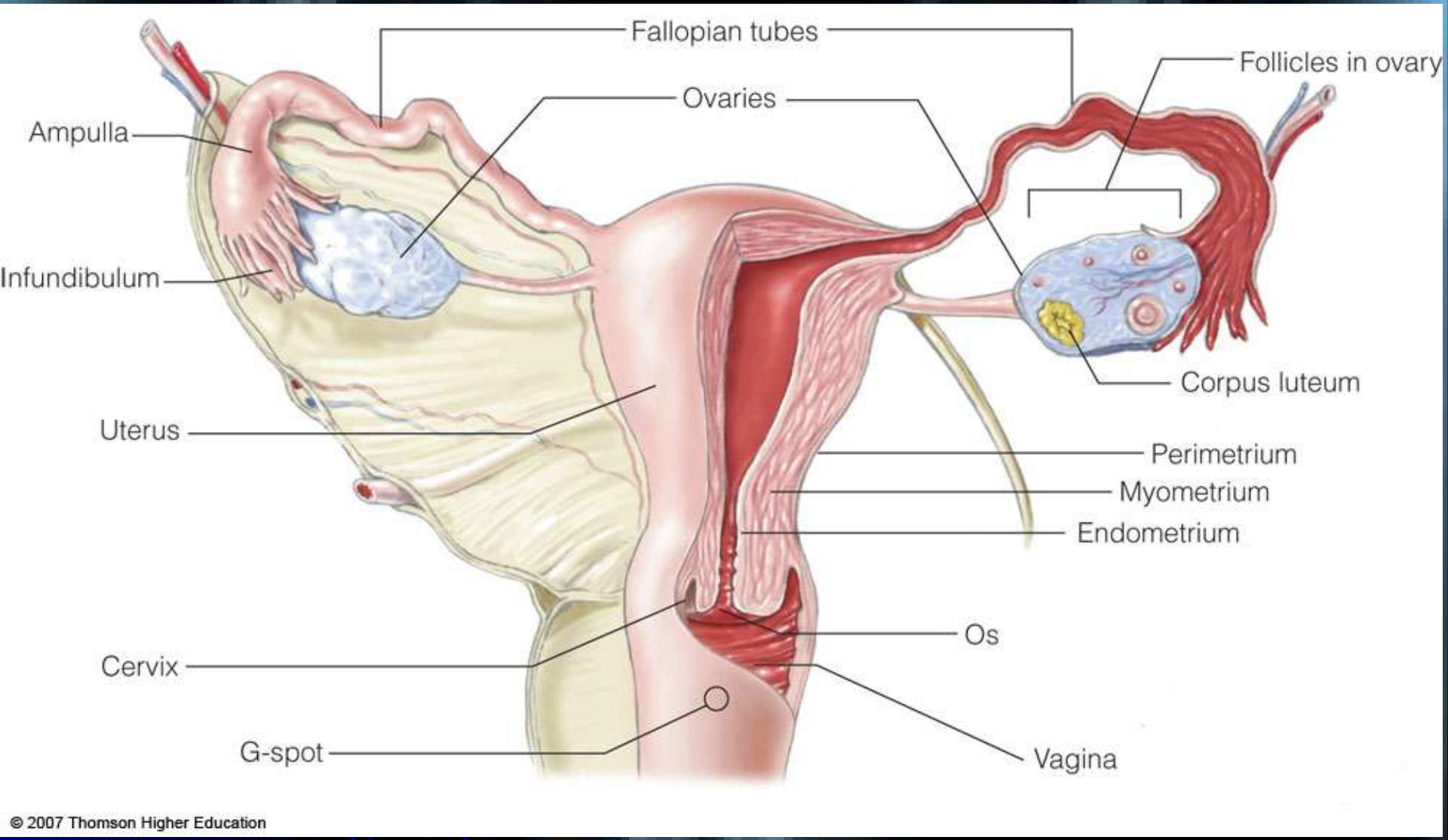
(a)



THE ACCESSORY SEX ORGANS ARE INVOLVED IN MAINTAINING OF THE SEX CELLS AND ASSISTING IN THE PROCESS OF FERTILIZATION.



The female internal reproductive system (front view).



The female internal reproductive system (front view).

WOMEN HAVE THE UTERUS, OVIDUCT, BREASTS, AND VAGINA.
MEN HAVE THE PENIS AND SCROTUM AS ACCESSORY ORGANS.

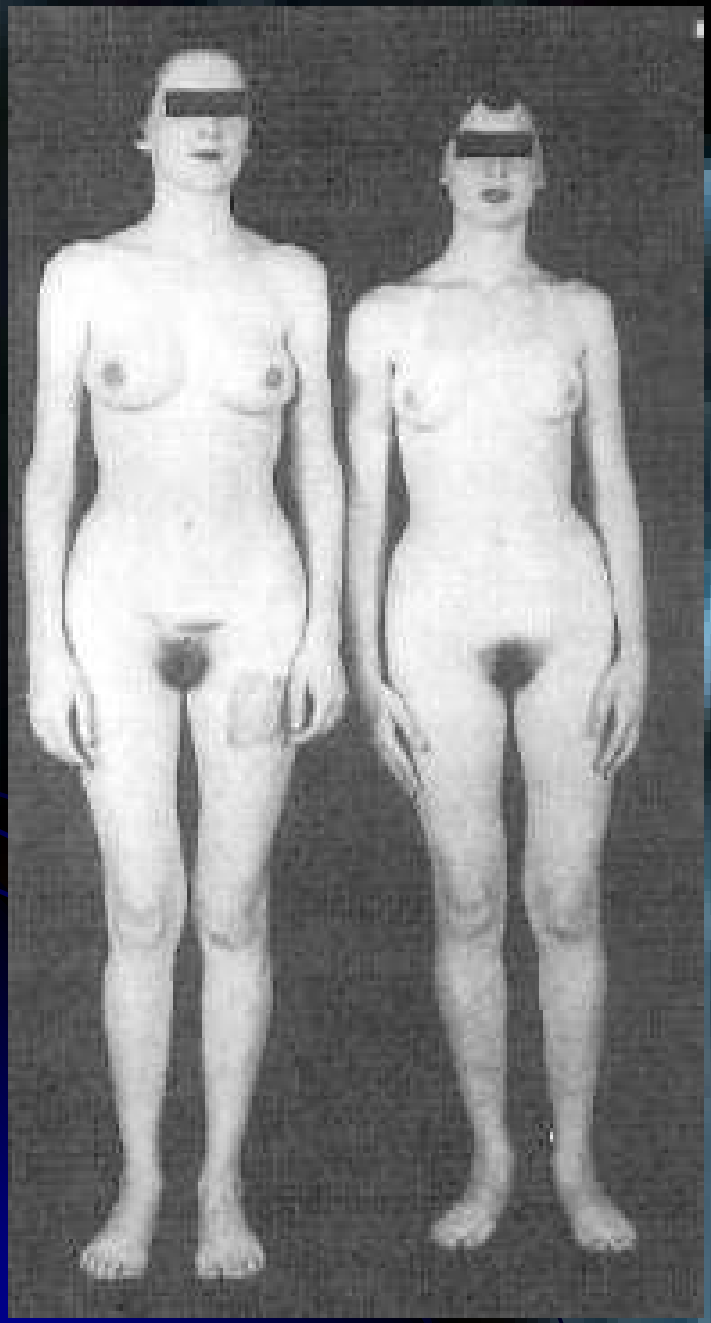
♀

♂

XX

XY

HUMAN KARYOTYPE
(46, XX - WOMAN, 46, XY - MEN)



XY

testes

normal testosterone

no receptor

insensitive to testosterone

HERMAPHRODITE


The Reproductive System

Function Preview

- Ensures continuity of the species by producing offspring
- In sexual reproduction new individuals are produced by the fusion of haploid gametes to form a diploid zygote.
- Sperm it is male gamete, ova (ovum singular) - female gamete.

There are some similarities and differences between males and females organs, but even so they have a common goal: a new life

- Primary genital organs: ***gonads***
  - ***Testes*** in males
  - ***Ovaries*** in females
  - These produce the ***gametes*** (sex cells)
    - ***Sperm*** in males
    - ***Ovum*** (egg) in females
  - Endocrine function also: secretion of hormones
- Accessory sex organs
  - Internal glands and ducts
  - External genitalia

- **Gonads**: organs that produce gametes and hormones
- Ducts: receive and transport gametes
- Accessory glands: secrete fluids into ducts
- Perineal structures: collectively known as **external genitalia**

Stages of Life

- Embryologically, males and females start out "sexually indifferent"
  - Gonads, ducts and externally identical structures
  - At 5 weeks of gestation changes start to take place
- Puberty: reproductive organs grow up into adult size and reproduction becomes possible
  - Between 10 and 15 years of old
  - Influence of rising levels of gonad hormones
    - Testosterone in males
    - Estrogen in females
- Female menopause (between 46 and 54):
  - Loss of ovulation and fertility

DEVELOPMENT OF GENITAL ORGANS

2 RESPECT FOR DEVELOPMENT:

I – PREFORMATION

(PREFORMATIO – FORMATION ADVANCE)

- THE BASIC POSTULATE: NOT CREATED ANYTHING NEW

II – EPIGENESIS

THE BASIC POSTULATE “OMNE ANIMAL EX OVO”

ALL PROCEEDS OUT EGGS

JUPITER, PRODUCING LIVING BEINGS FROM THE EGG. FRONTISPIECE BOOKS HARVEY "ON THE ORIGIN OF ANIMALS" (1651R.).

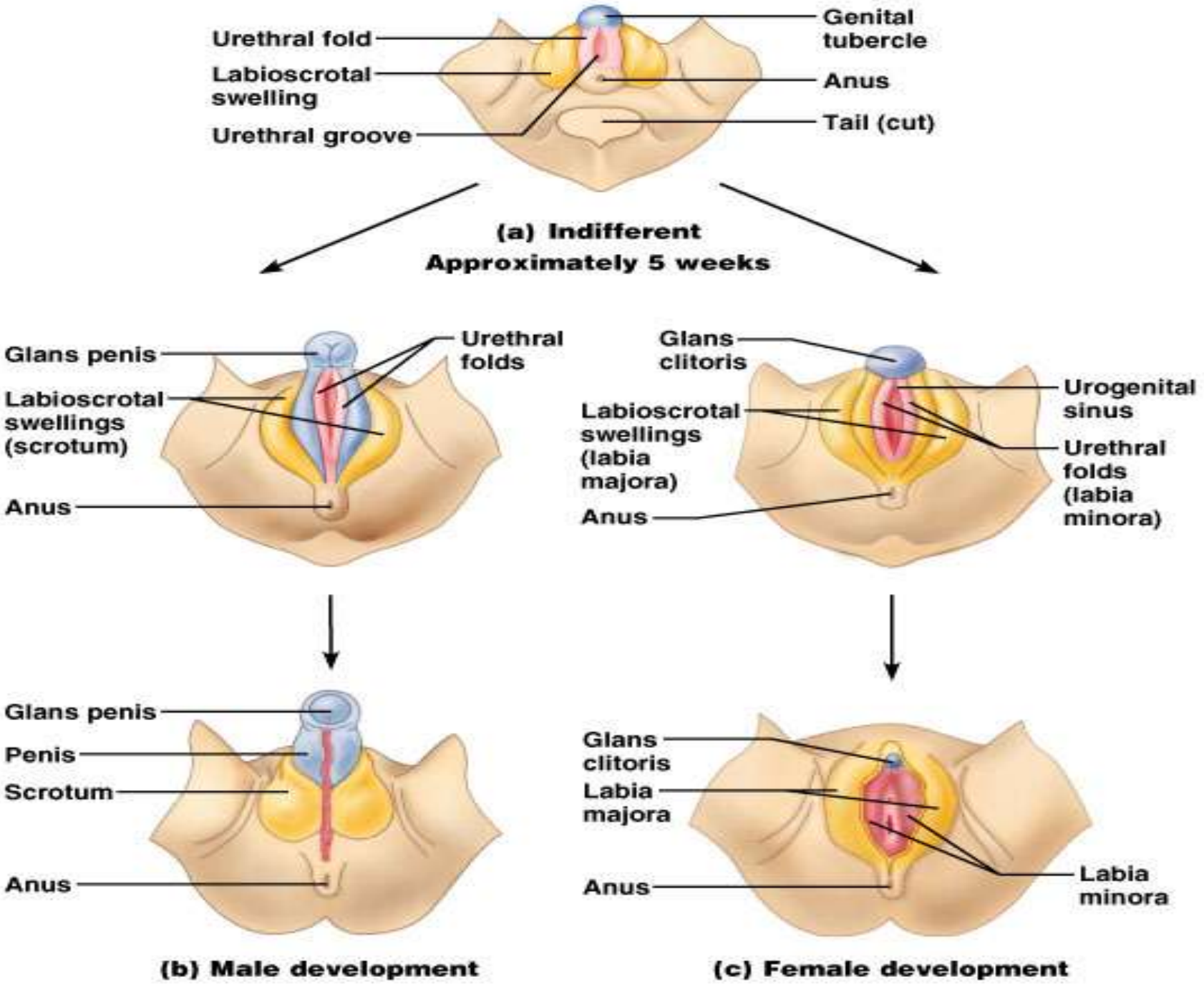
REHNER DE GRAAFF (1641-1678). _
WITH HIS OPERA OMNIA (1677P.).

HANS BALDUNG. SEVEN WOMEN AGES. 1544. MUSEUM OF FINE ARTS. LEIPZIG

DIFFERENTIATION REPRODUCTIVE SYSTEM - A COMPLEX PROCESS WHICH INVOLVES DIFFERENT MECHANISMS. IN THEIR IMPLEMENTATION ARE 2 IMPORTANT PRINCIPLES:

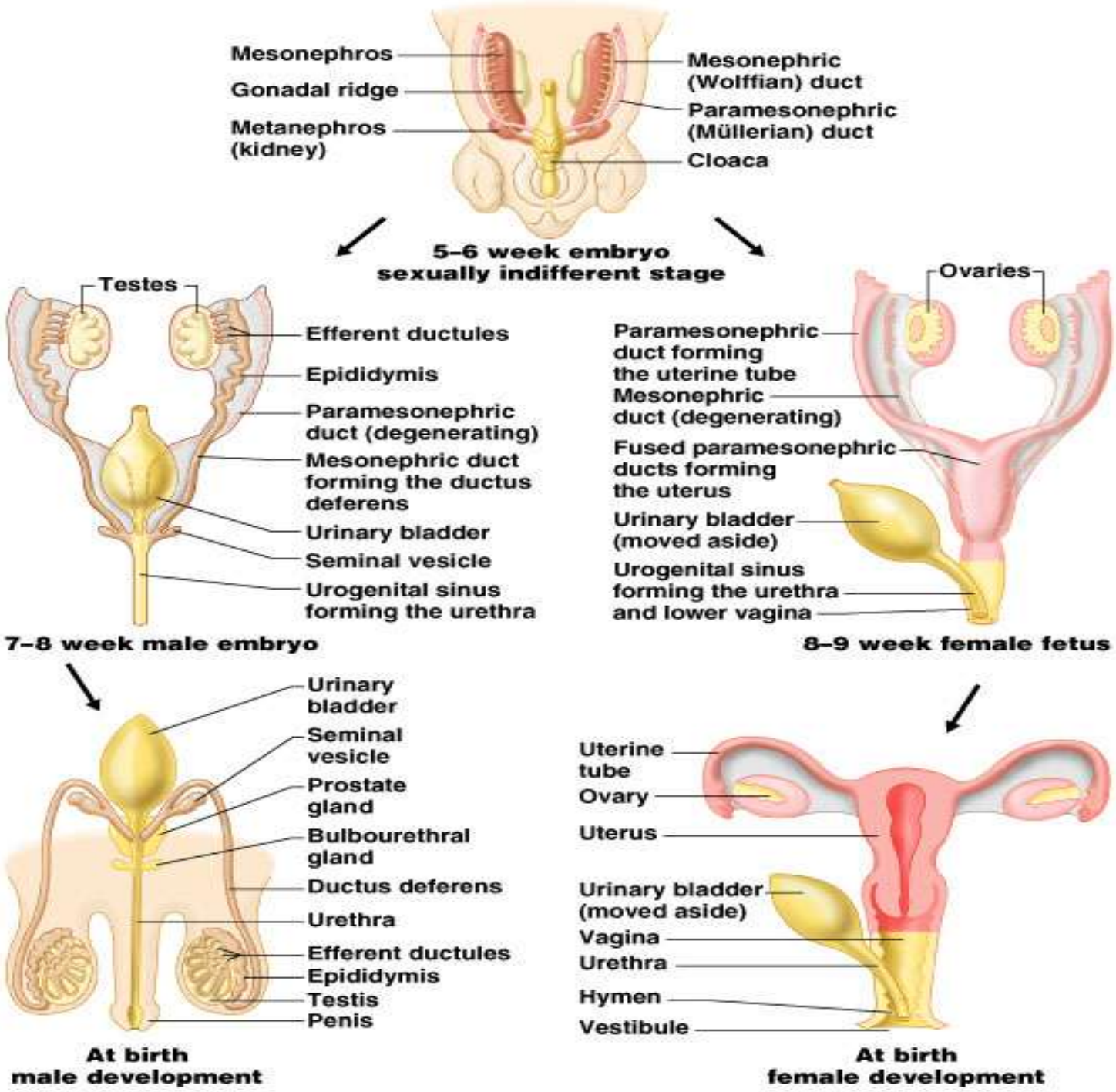
1) IN THE EARLY DEVELOPMENT - INDIFFERENT STAGE DURING WHICH THE STRUCTURE IS NOT INDENTIFICATE LIKE A MEN OR WOMEN;

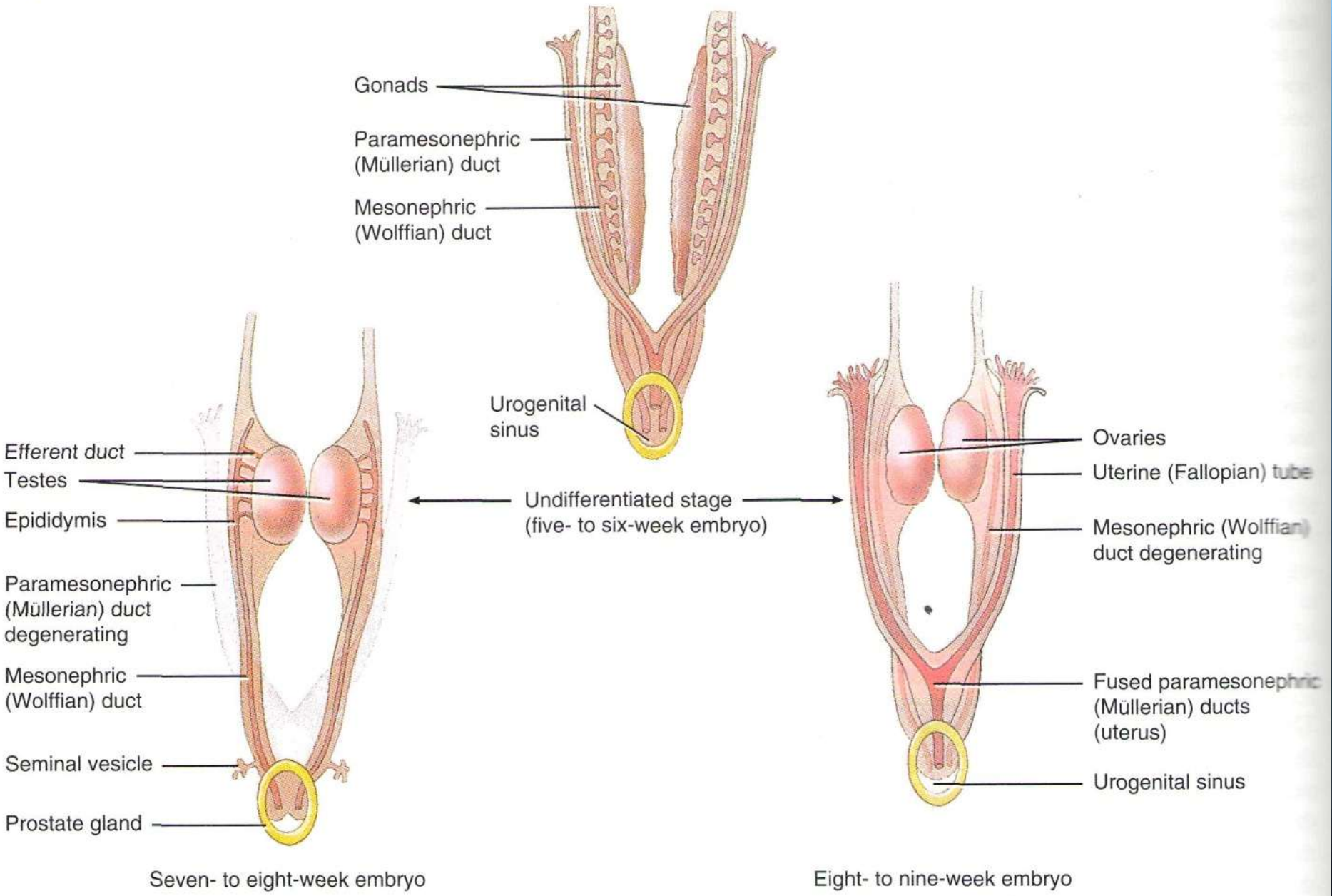
2) NO EFFECT OF ANDROGENS LEADS TO DIFFERENTIATION OF SEXES FEMALE TYPE.

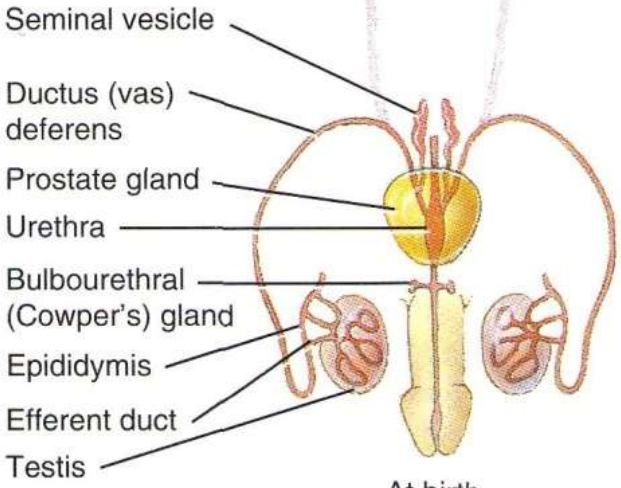

Urethral fold
Labioscrotal swelling
Urethral groove
Genital tubercle
Anus
Tail (cut)
(a) Indifferent
Approximately 5 weeks
Glans penis
Labioscrotal swellings (scrotum)
Anus
Urethral folds
Glans clitoris
Labioscrotal swellings (labia majora)
Anus
Urogenital sinus
Urethral folds (labia minora)
Glans penis
Penis
Scrotum
Anus
(b) Male development
Glans clitoris
Labia majora
Anus
Labia minora
(c) Female development

DIFFERENTIATION MALE AND FEMALE GENITALIA OCCURS AT A LATER STAGE. GONADS, GENITAL DUCTS AND EXTERNAL GENITALIA ARE FORMED FROM DIFFERENT, BUT RELATED ELEMENTS.

IMPORTANT PROCESSES IN DEVELOPMENT OF ORGANS ARE DESCENT GONADS.

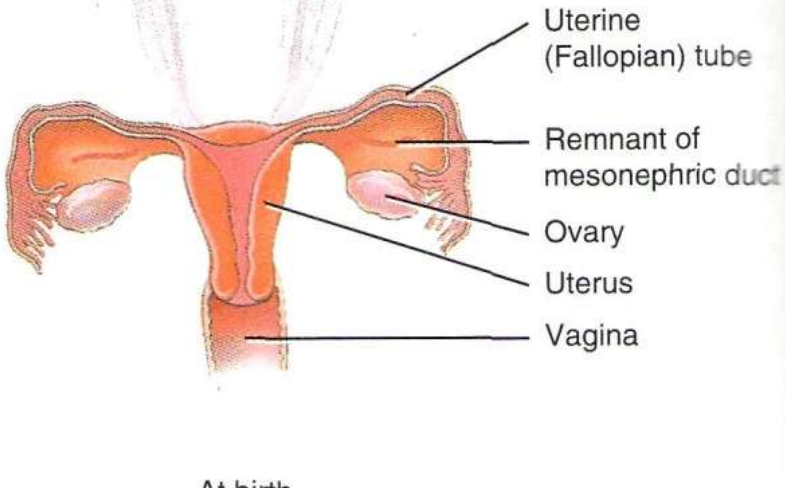

Mesonephros
Gonadal ridge
Metanephros (kidney)
Mesonephric (Wolffian) duct
Paramesonephric (Müllerian) duct
Cloaca
5–6 week embryo sexually indifferent stage
Testes
Efferent ductules
Epididymis
Paramesonephric duct (degenerating)
Mesonephric duct forming the ductus deferens
Urinary bladder
Seminal vesicle
Urogenital sinus forming the urethra
7–8 week male embryo
Ovaries
Paramesonephric duct forming the uterine tube
Mesonephric duct (degenerating)
Fused paramesonephric ducts forming the uterus
Urinary bladder (moved aside)
Urogenital sinus forming the urethra and lower vagina
8–9 week female fetus
Urinary bladder
Seminal vesicle
Prostate gland
Bulbourethral gland
Ductus deferens
Urethra
Efferent ductules
Epididymis
Testis
Penis
At birth male development
Uterine tube
Ovary
Uterus
Urinary bladder (moved aside)
Vagina
Urethra
Hymen
Vestibule
At birth female development


Gonads
Paramesonephric (Müllerian) duct
Mesonephric (Wolffian) duct
Urogenital sinus
Undifferentiated stage (five- to six-week embryo)
Efferent duct
Testes
Epididymis
Paramesonephric (Müllerian) duct degenerating
Mesonephric (Wolffian) duct
Seminal vesicle
Prostate gland
Seven- to eight-week embryo
Ovaries
Uterine (Fallopian) tube
Mesonephric (Wolffian) duct degenerating
Fused paramesonephric (Müllerian) ducts (uterus)
Urogenital sinus
Eight- to nine-week embryo



At birth

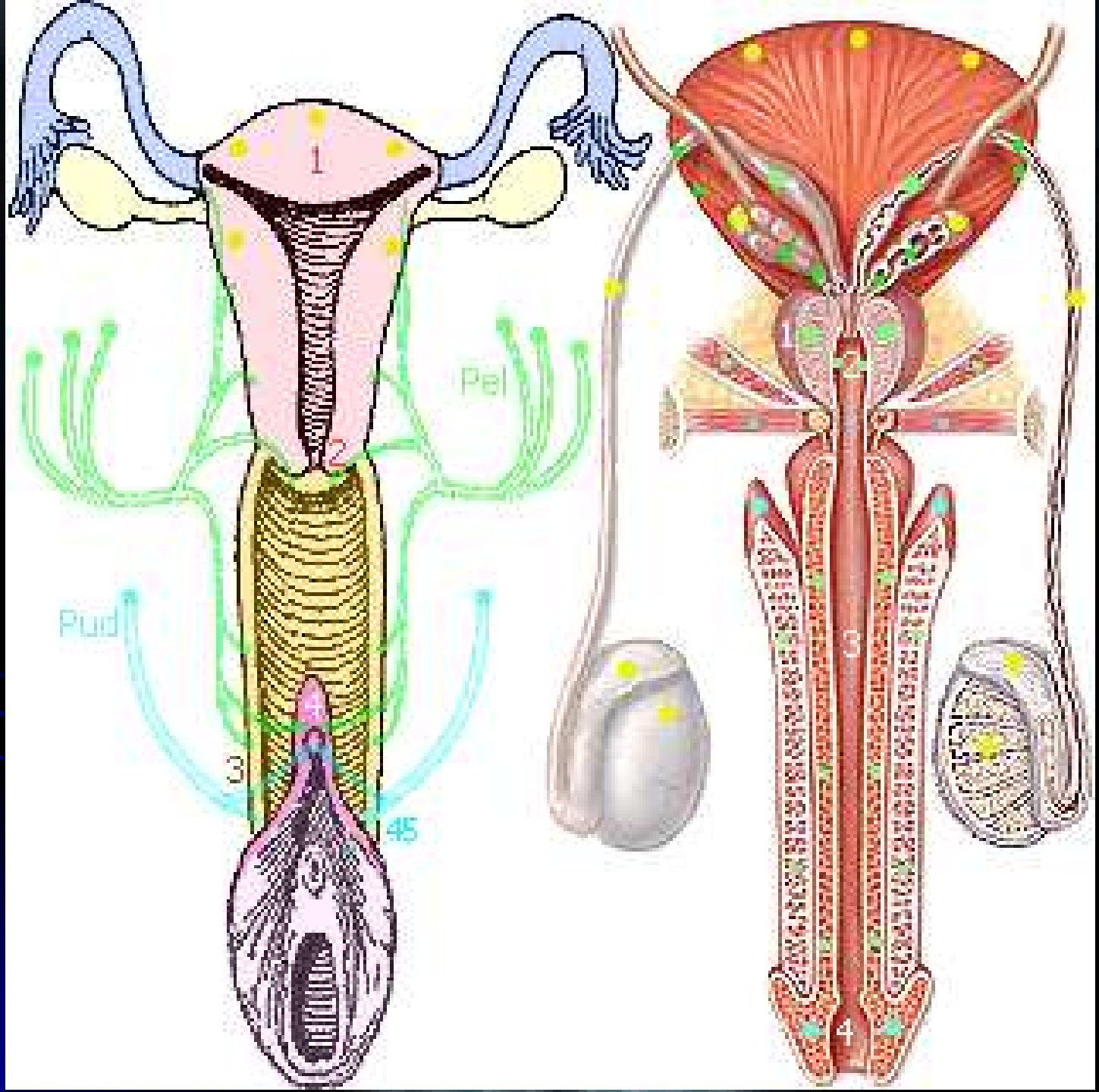
MALE DEVELOPMENT



At birth

FEMALE DEVELOPMENT

LEADING ROLE IN THE DIFFERENTIATION OF THE EXTERNAL GENITALIA PLAY ANDROGENS; THEIR PRESENCE IS NECESSARY FOR THE DEVELOPMENT OF MALE REPRODUCTIVE ORGANS.


1
2
Pel
Pud
3
45
1
2
3
4

IN THE ABSENCE OF ANDROGENS FORMED THE FEMALE TYPE.

Розвиток зовнішніх статевих органів у жіночого плода на п'ятому місяці ембріогенезу (**А**) і в новонародженої дитини (**Б**).

The Female Reproductive System

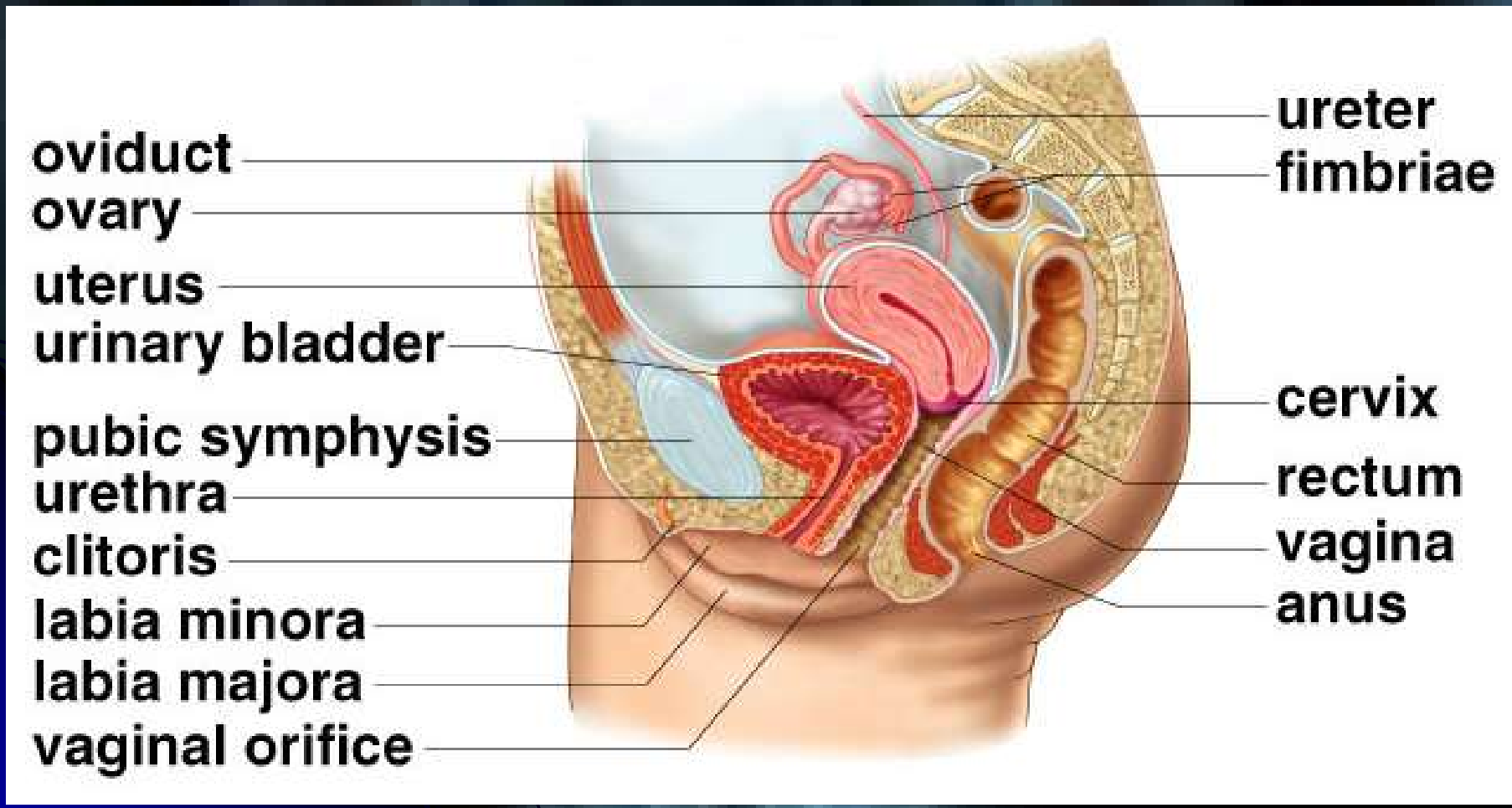
- Produces sex hormones and functional gametes
- Protects and supports developing of embryo
- Nourishes newborn infant

Structures of the Reproductive System

- The Female Reproductive System
  - **Ovaries** or female gonads:
    - Release one immature gamete (**oocyte**) per month
    - Produce hormones
  - Uterine tubes:
    - Carry oocytes to uterus:
      - if sperm reaches oocyte, fertilization is initiated and oocyte matures into **ovum**
  - Uterus:
    - Encloses and supports developing embryo
  - Vagina:
    - Connects uterus with exterior

Anatomy of Female Reproductive System

- ovaries: female gonads; produce eggs & hormones
- reproductive tract consists of “ducts” and glands



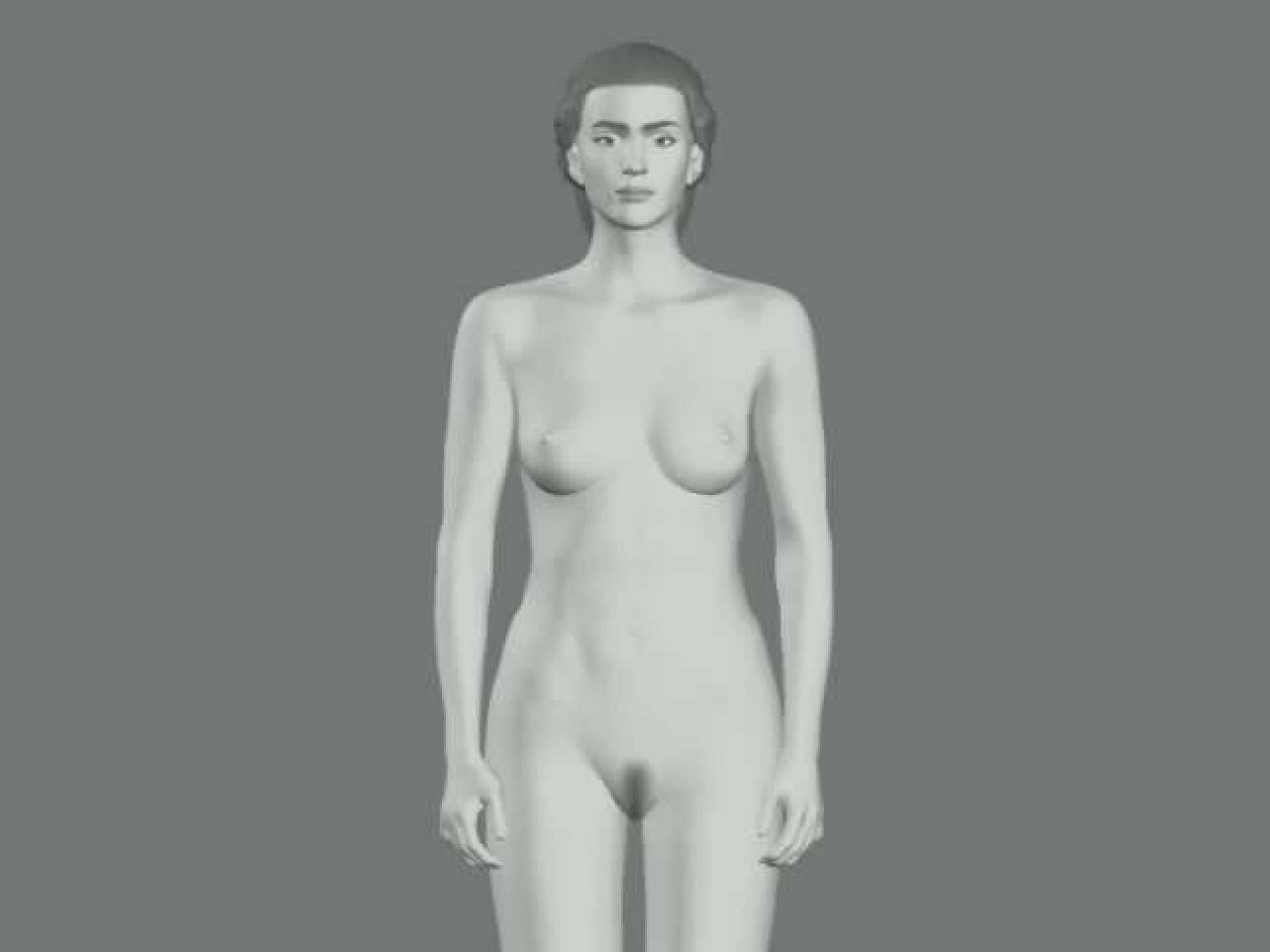
TOPOGRAPHIC CLASSIFICATION:

INTERNAL AND EXTERNAL GENITALIA.

INTERNAL FEMALE GENITAL ORGANS ARE:

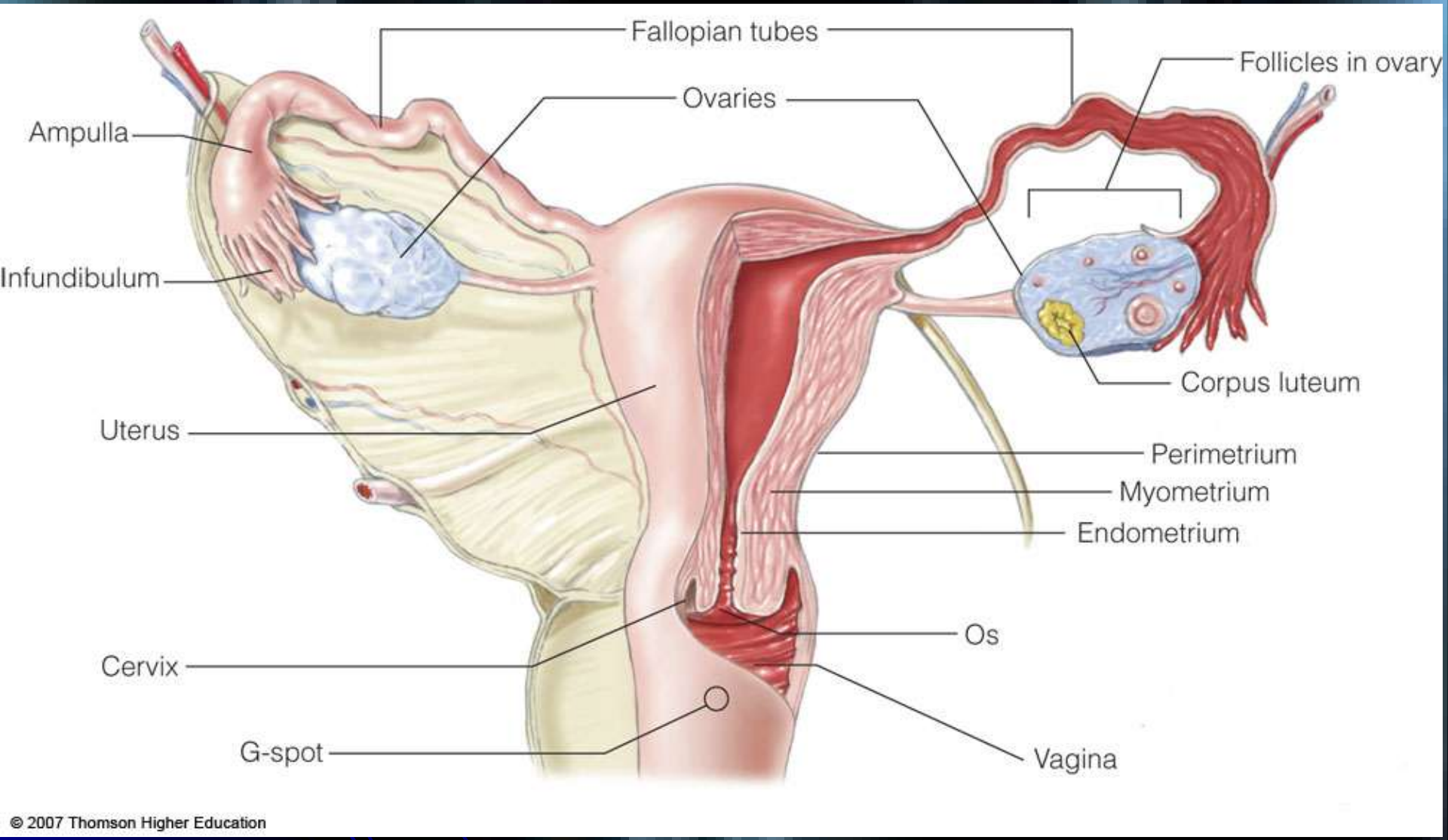
- **OVARY,**
- **UTERINE (FALLOPIAN) TUBES,**
- **UTERUS,**
- **VAGINA.**

Please write down the names of the female reproductive structures

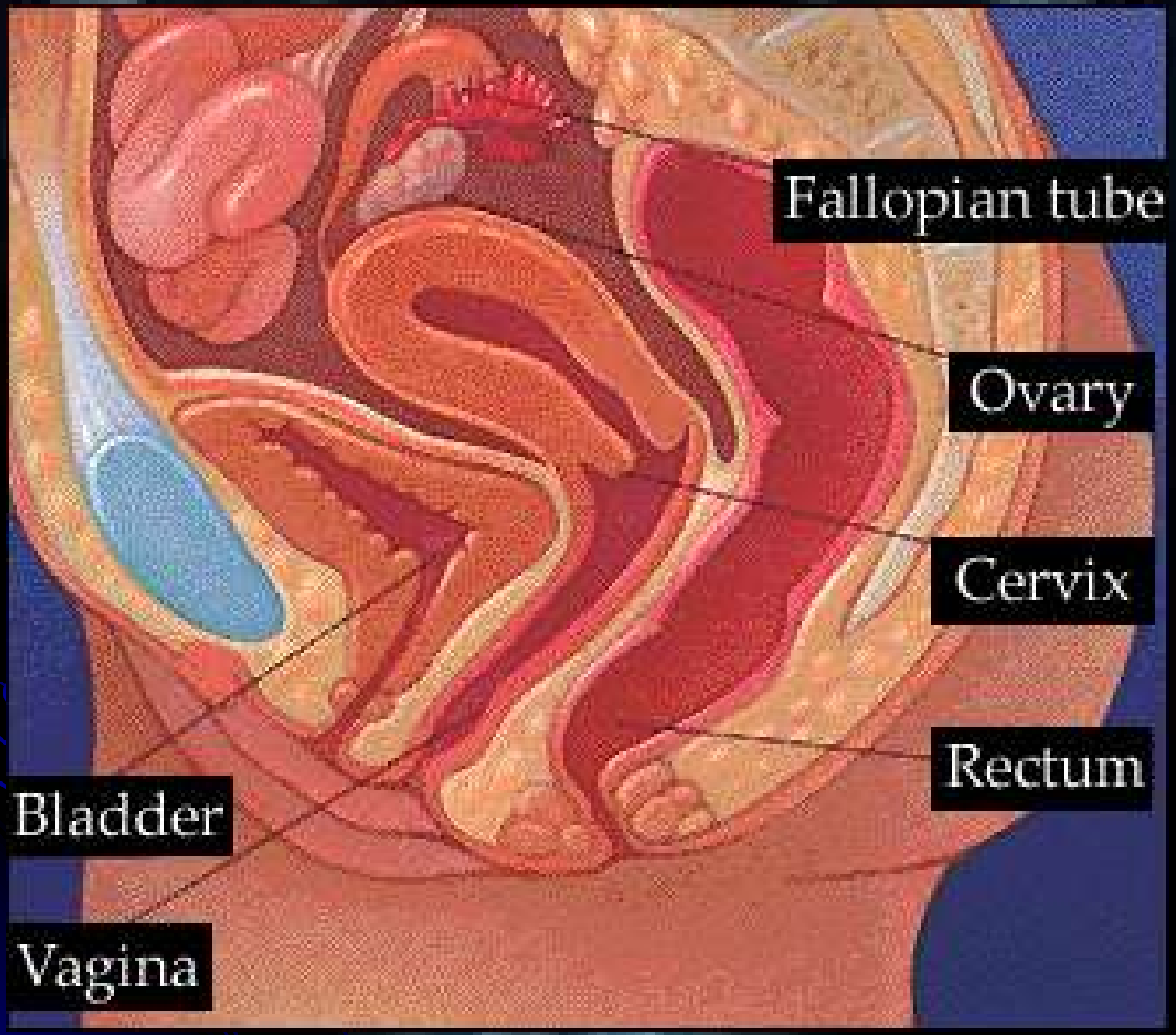


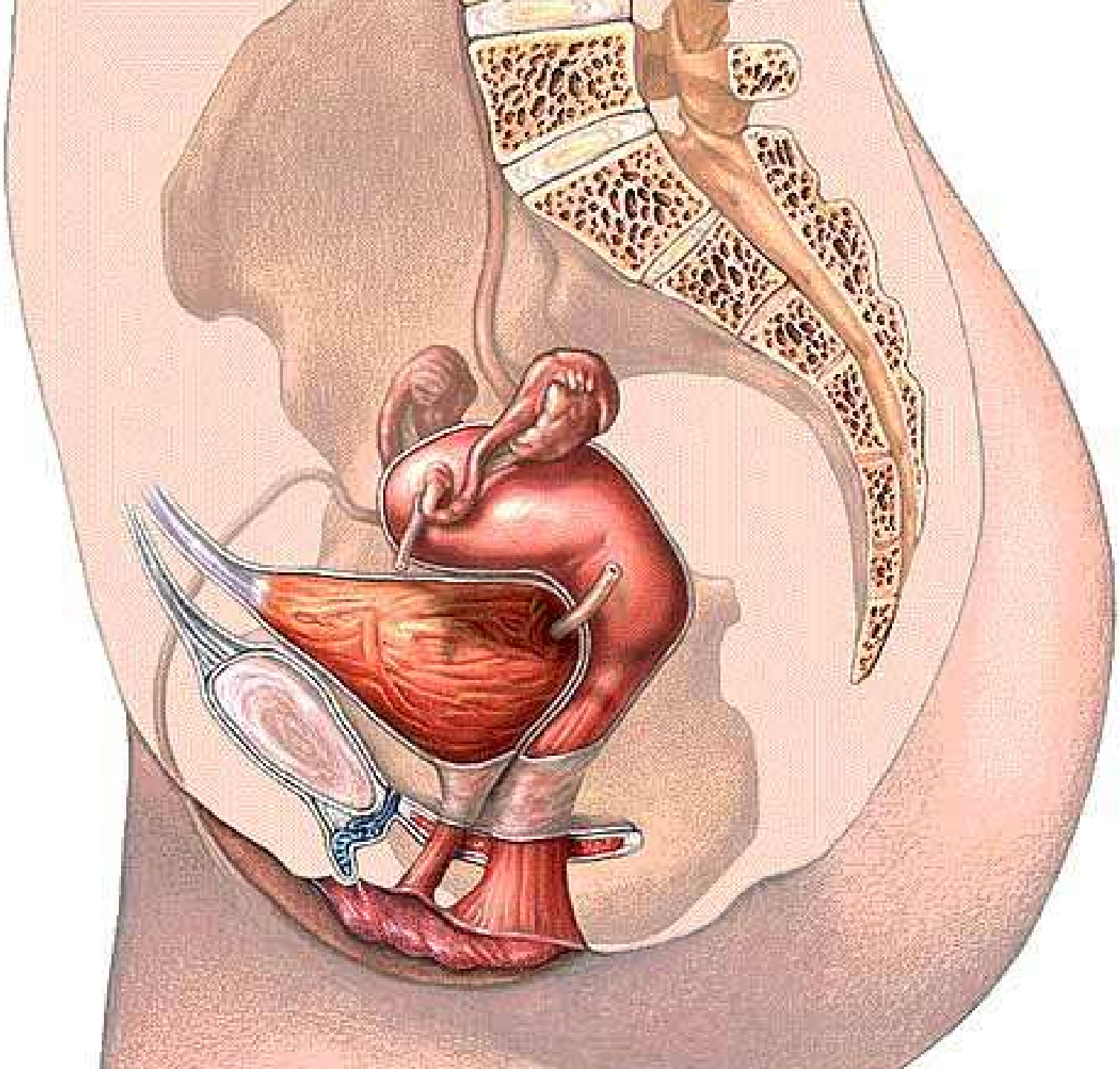
Division

- GYNECOLOGY- study of female reproductive system (organs, hormones and diseases)
- OBSTETRICS - ”obstetrix” = midwife, specialty concerning on pregnancy and parturition
- NEONATOLOGY - study and treatment of the newborn child



The female internal reproductive system (front view).


Fallopian tube
Ovary
Cervix
Rectum
Bladder
Vagina



FEMALE REPRODUCTIVE SYSTEM (SYSTEMA GENITALE FEMININUM)

INTERNAL FEMALE GENITAL ORGANS (ORGANA GENITALIA FEMININA INTERNA)

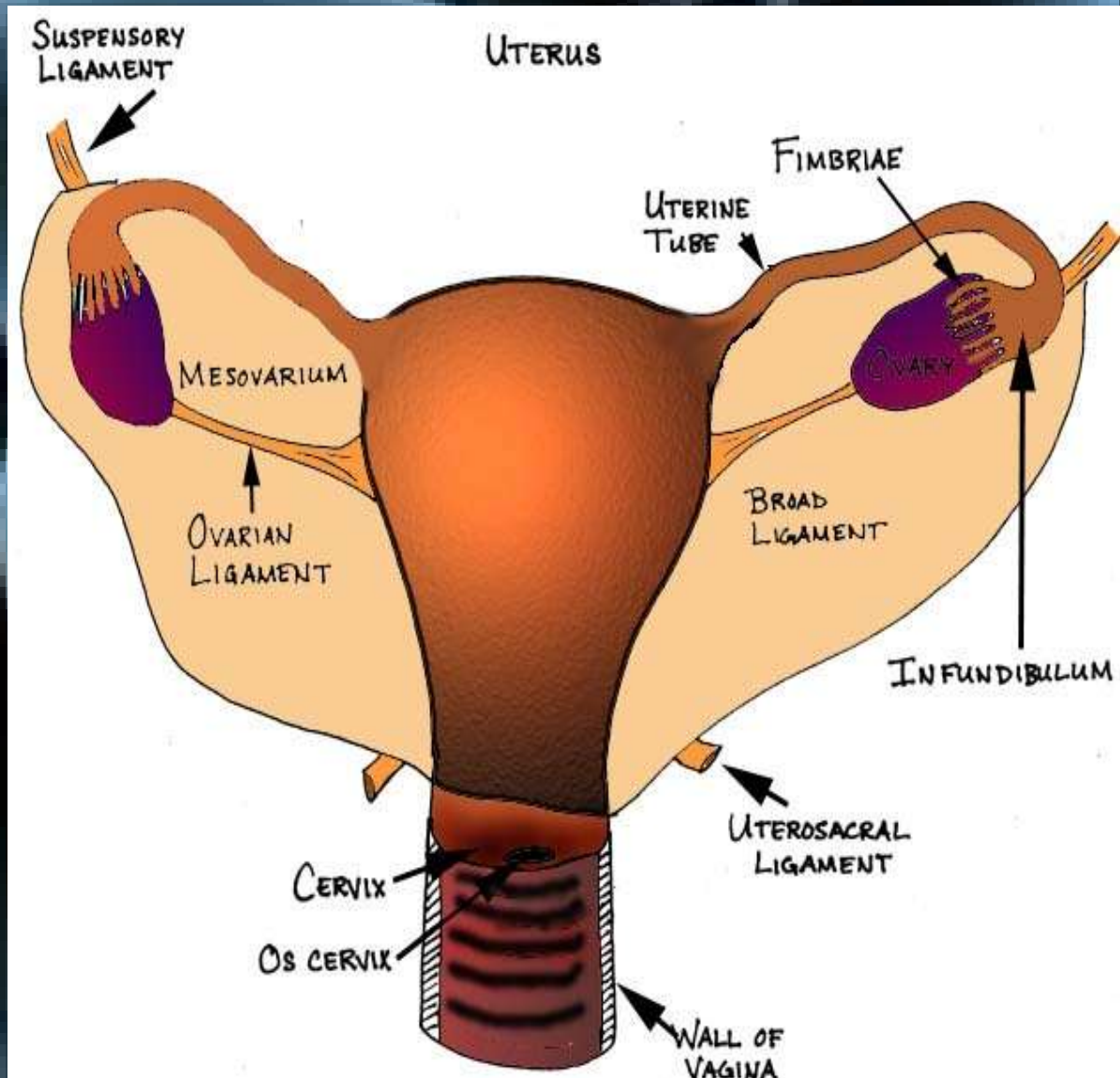
- OVARY(OVARIUM)
- UTERINE TUBE (TUBA UTERINA)
- UTERUS (UTERUS)
- VAGINA (VAGINA)

THE EXTERNAL FEMALE GENITAL ORGANS (ORGANA GENITALIA FEMININA EXTERNA)

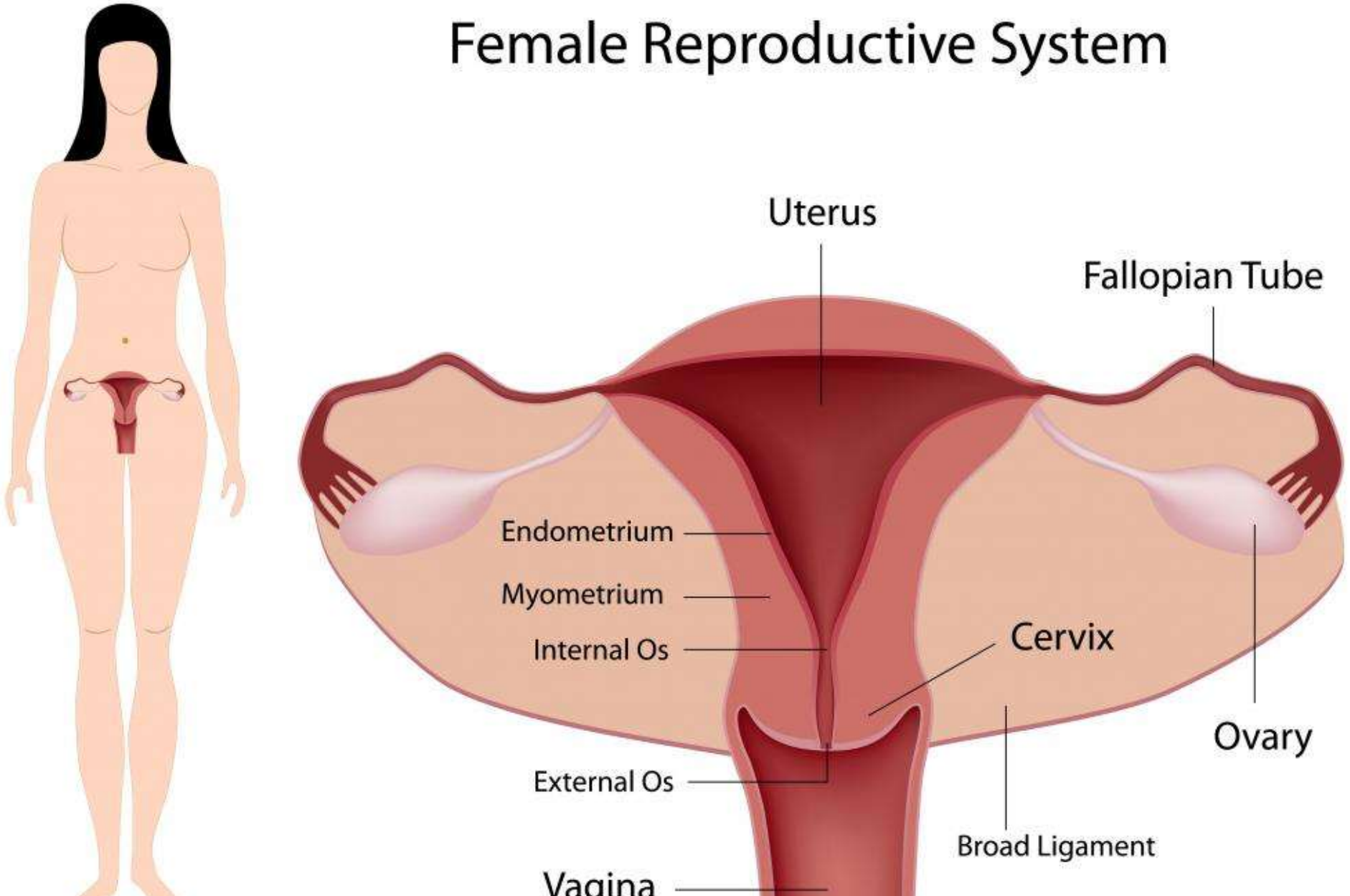
- WOMEN PUDENDAL AREA (PUDENDUS FEMININUM VULVA)
- CLITORIS
- FEMALE URETHRA (URETRHA FEMININA)

FRS: INTERNAL STRUCTURES

- Ovaries
- Fallopian tubes
- Uterus
- Cervix



Female Reproductive System

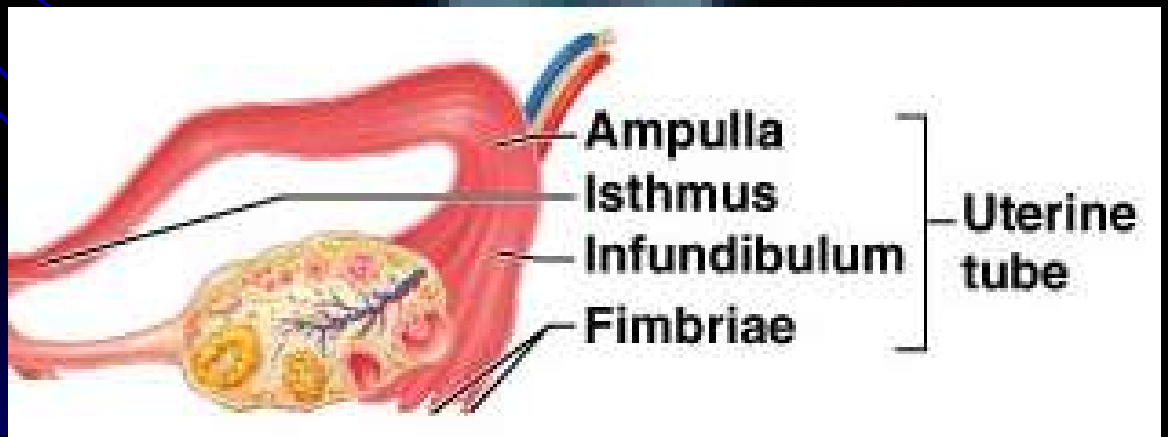


FEMALE REPRODUCTIVE SYSTEM

- Functions
  - produce ova
  - receive sperm
  - site of fertilization
  - hold & nourish embryo/fetus
  - bear infant
  - nurse infant

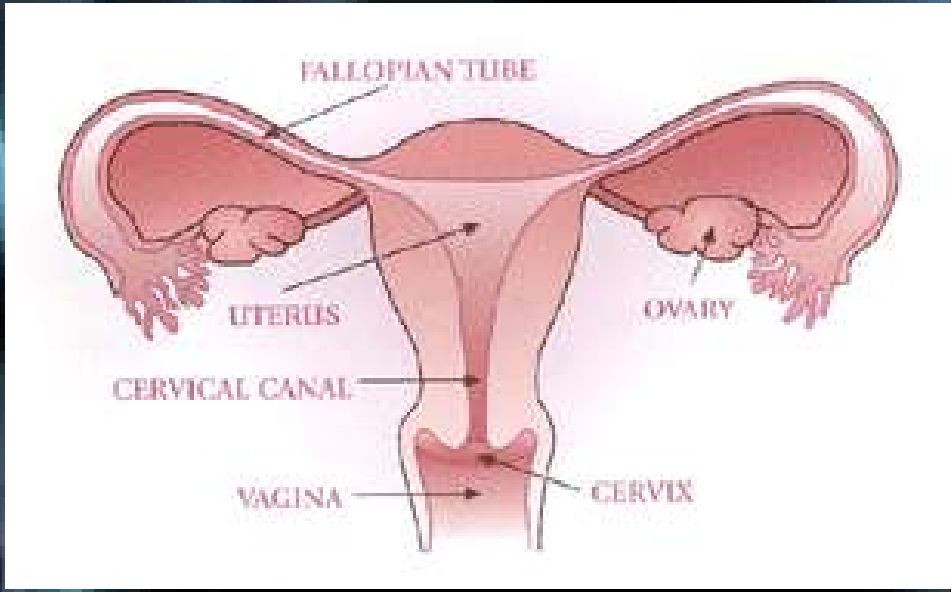
Female Reproductive System

- **Uterine (Fallopian) tubes**
  - Extend laterally to the uterus
  - Infundibulum = open, funnel-shaped end
  - Fimbriae = thin, finger-like ends of infundibulum



Fallopian Tubes

- Pair organ
- 5 inches in length
- Attached to the upper part of the uterus
- Function
  - Move the ovum from the ovary to the uterus
  - Cilia and peristalsis keep the ovum moving
  - Place of fertilization, connect the egg and sperm cells.

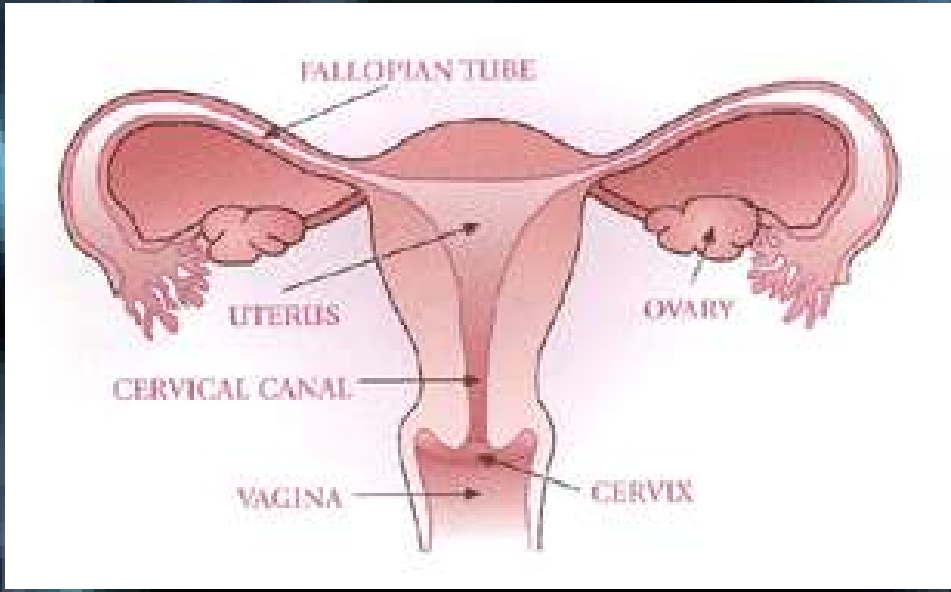


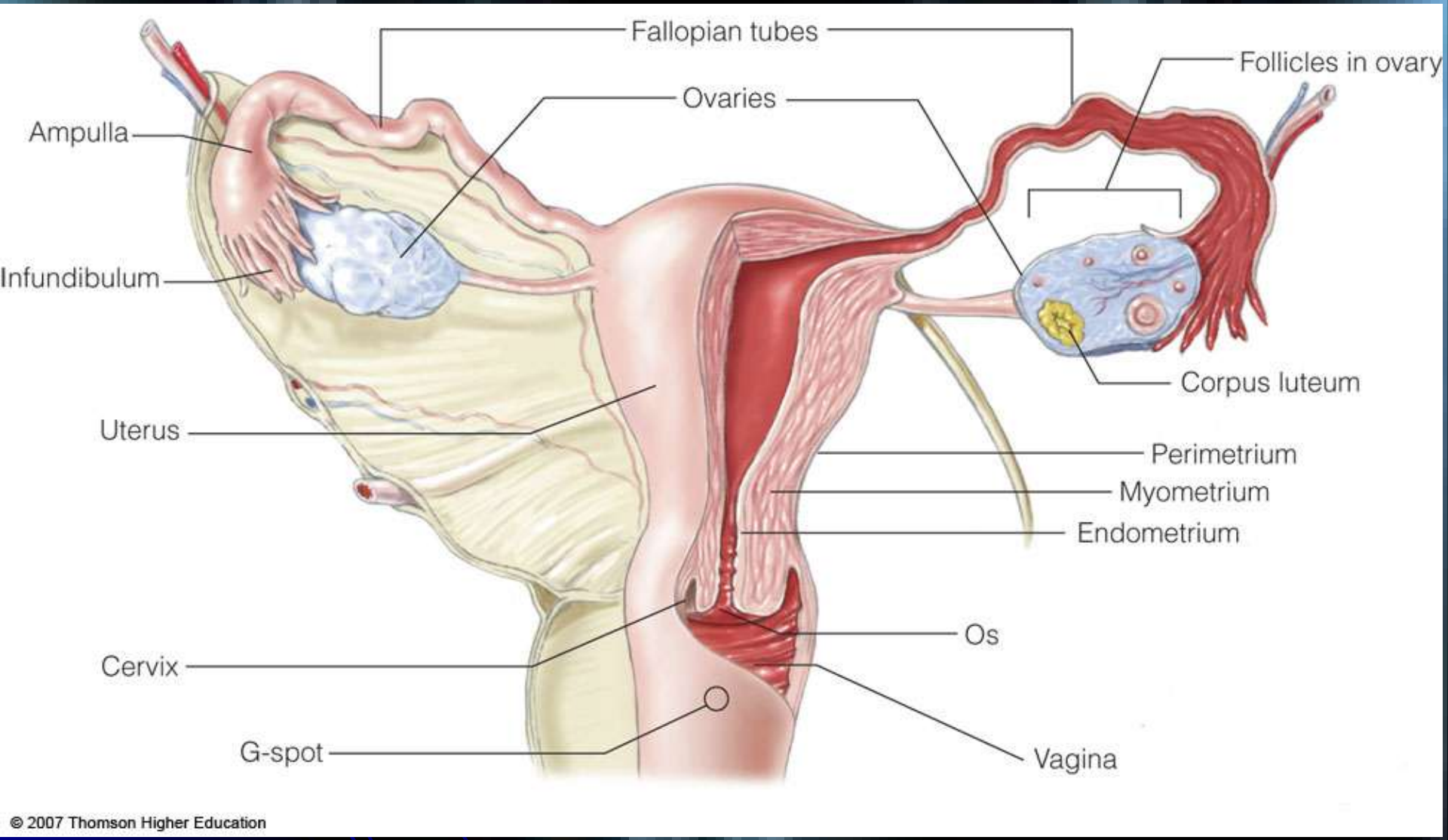
Female Reproductive System

- Uterine (Fallopian) tubes
  - Serosa = Peritoneum
  - Muscular
  - Mucosa
    - ciliated columnar epithelium
  - Action of cilia & muscular coat move ovum/embryo to uterus

Fallopian Tubes

- Pair organ
- 5 inches in length
- Attached to the upper part of the uterus
- Function
  - Move the ovum from the ovary to the uterus
  - Cilia and peristalsis keep the ovum moving
  - Site of fertilization, connect the egg and sperm cells

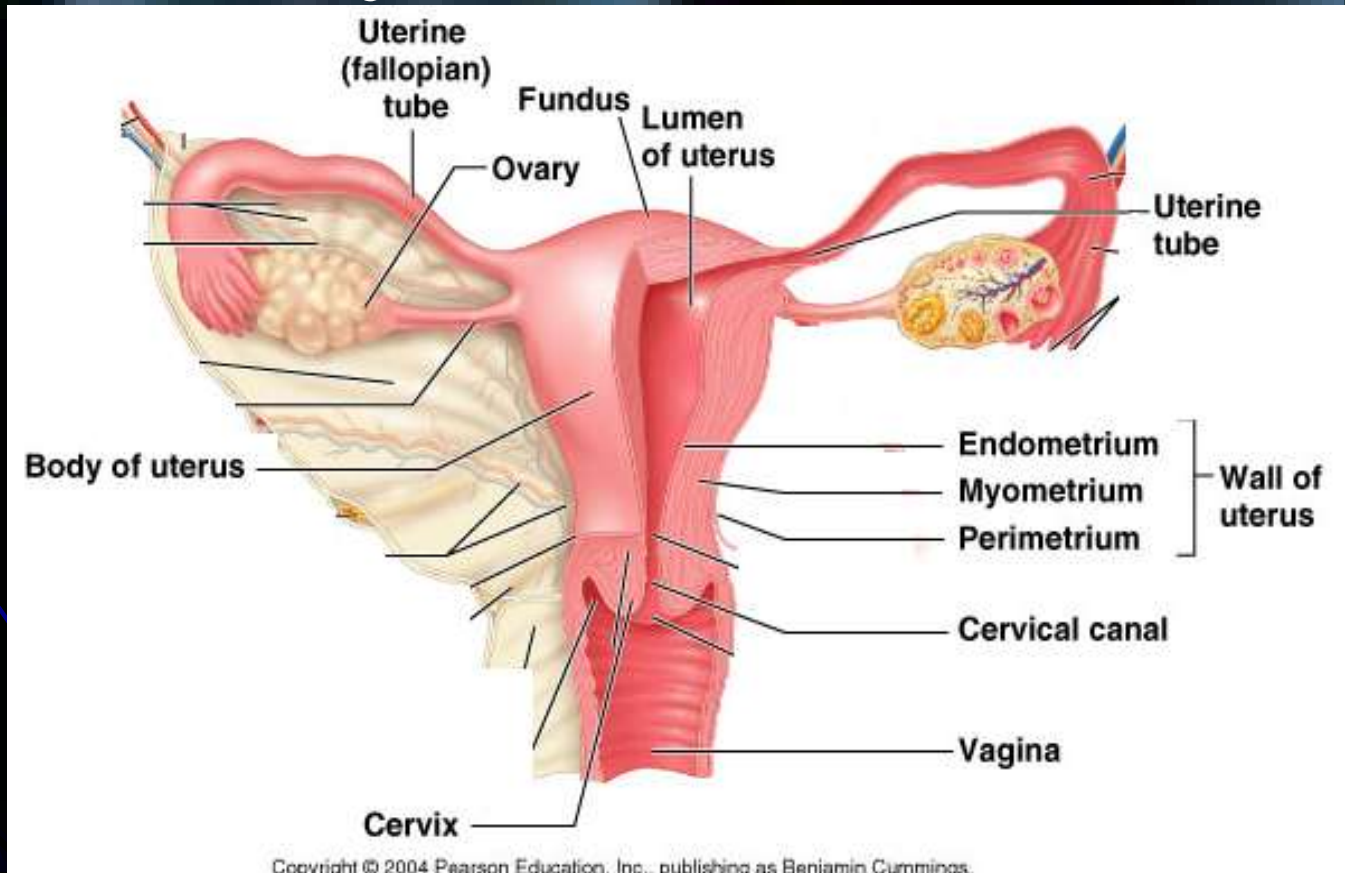




The female internal reproductive system (front view).

Female Reproductive System

- Uterus
  - Lies over urinary bladder
  - Fundus
  - Body
  - Cervix

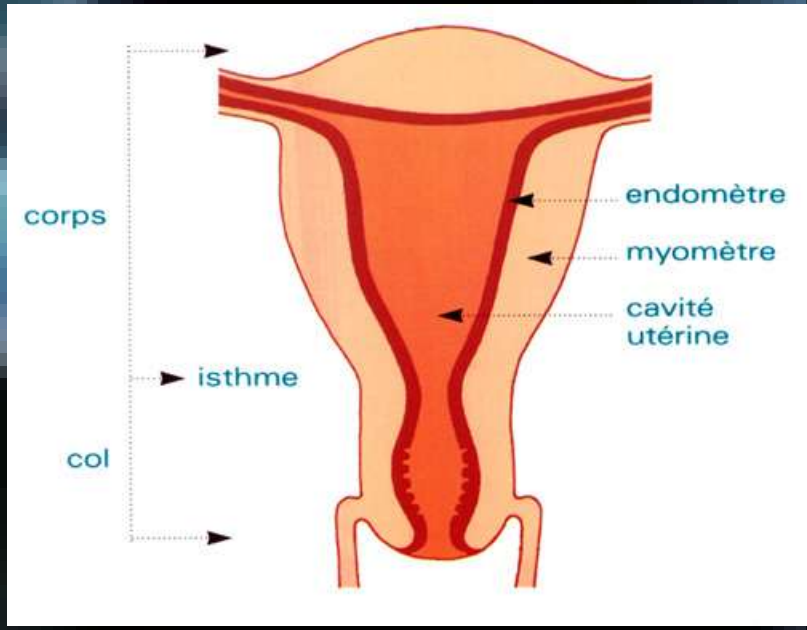


Uterus

- Hollow, muscular, pear-shaped organ
- 3 parts
  - Fundus – top
  - Body – middle
  - Cervix – narrow bottom
- Function
  - Organ of menstruation
  - Allows for the development and growth of the fetus
  - Contracts during birth to aid in the expulsion of the fetus
- Layers

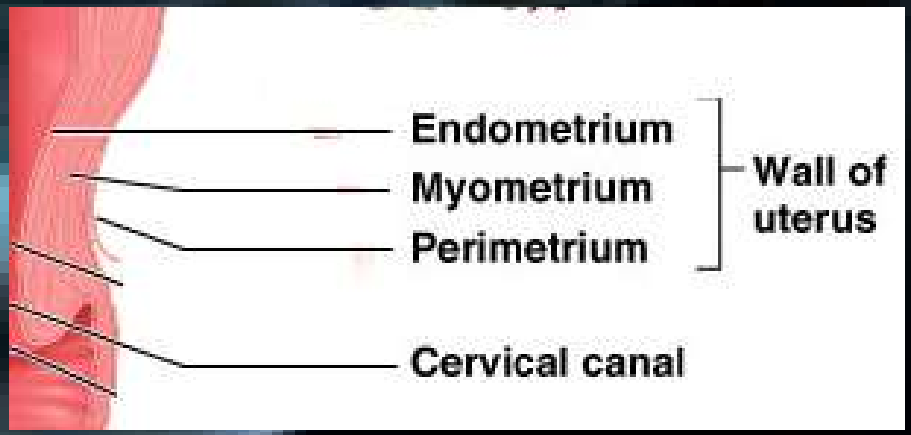
  - endometrial

  - If fertilization does not occur, this lining deteriorate, resulting in menstruation



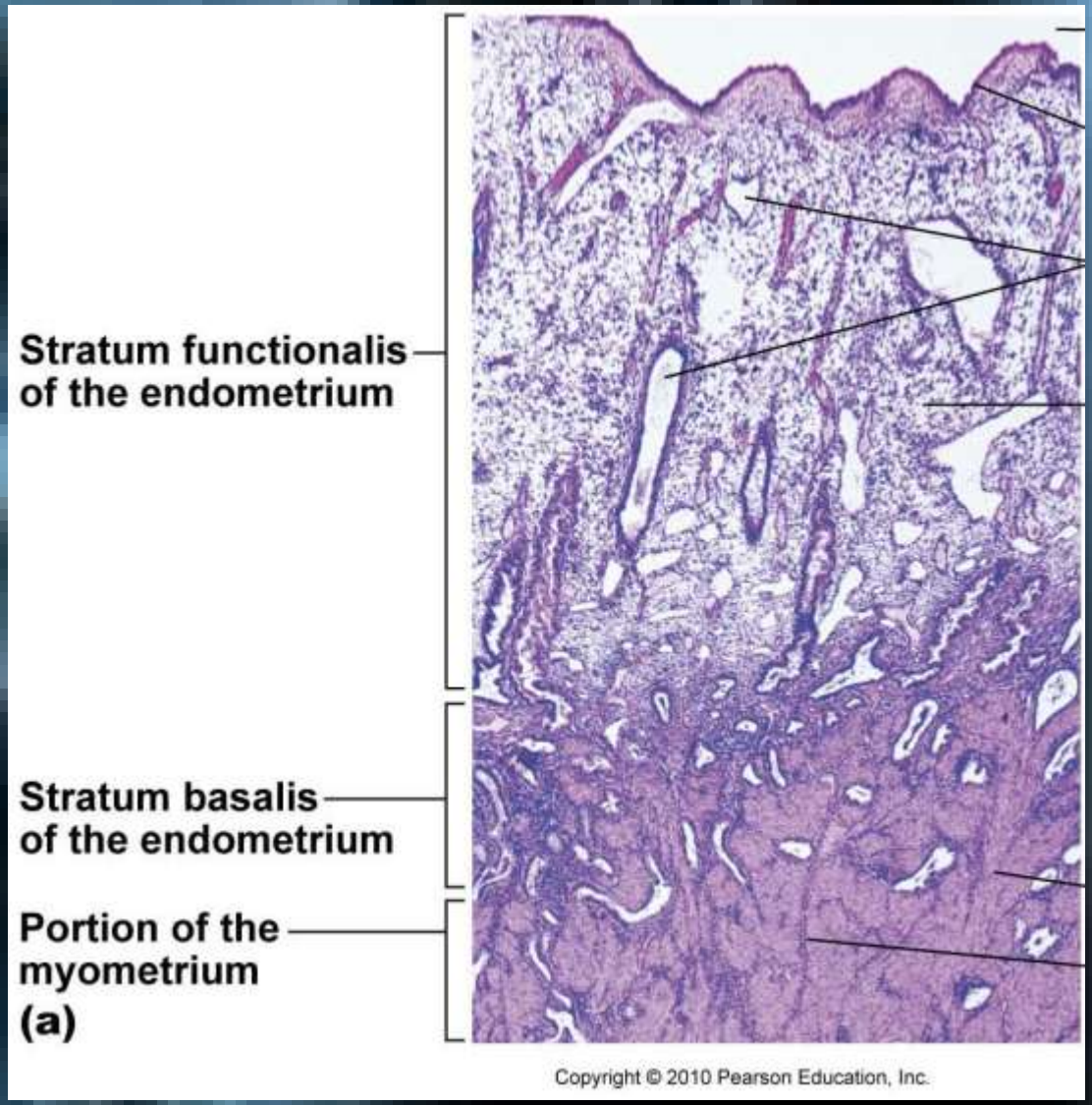
Female Reproductive System

- Uterus
  - Perimetrium
    - Serosa, peritoneum
  - Myometrium
    - Smooth muscle
  - Endometrium
    - Stratum basalis
    - Stratum functionalis



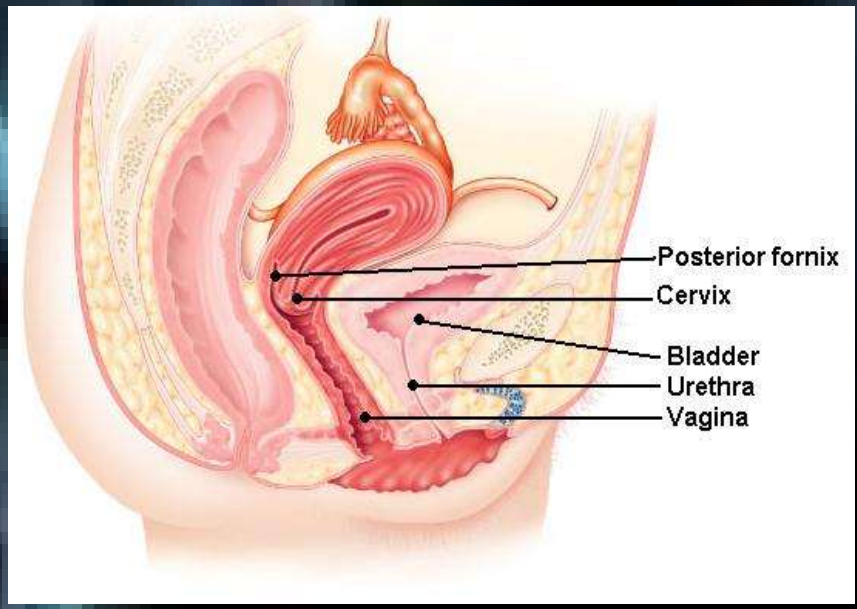
Female Reproductive System

- Uterus
  - Endometrium
    - Stratum functionalis
      - Shed during menses
      - Regrows
    - Stratum basalis
      - Permanent



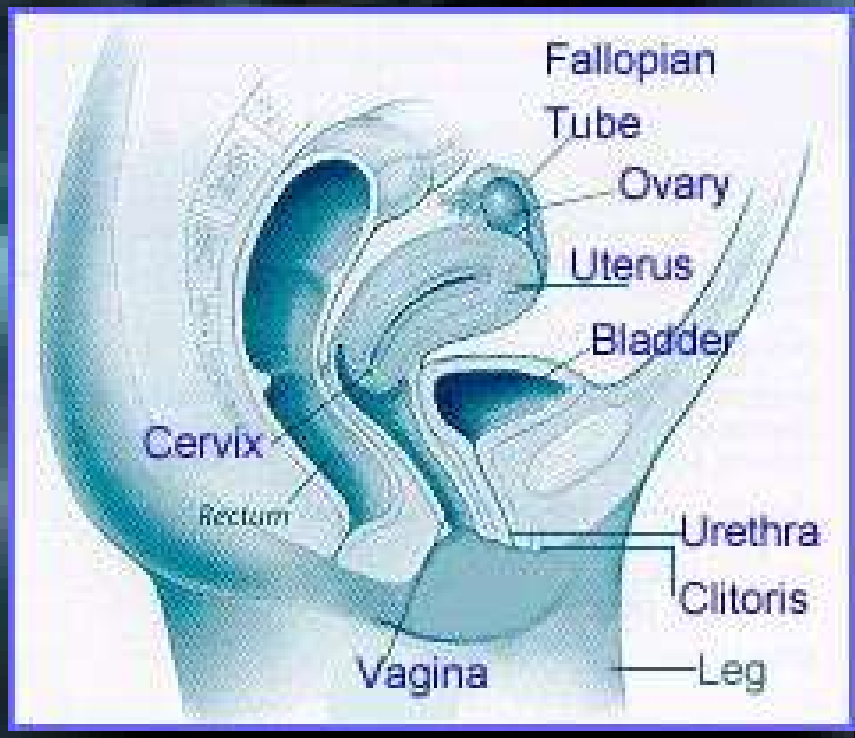
Female Reproductive System

- Vagina
  - Lower part of birth canal
  - Receptacle for penis
  - Lined with stratified squamous epithelium
  - Extensible
    - Expands to allow passage of fetal head, ~ 10 cm in diameter



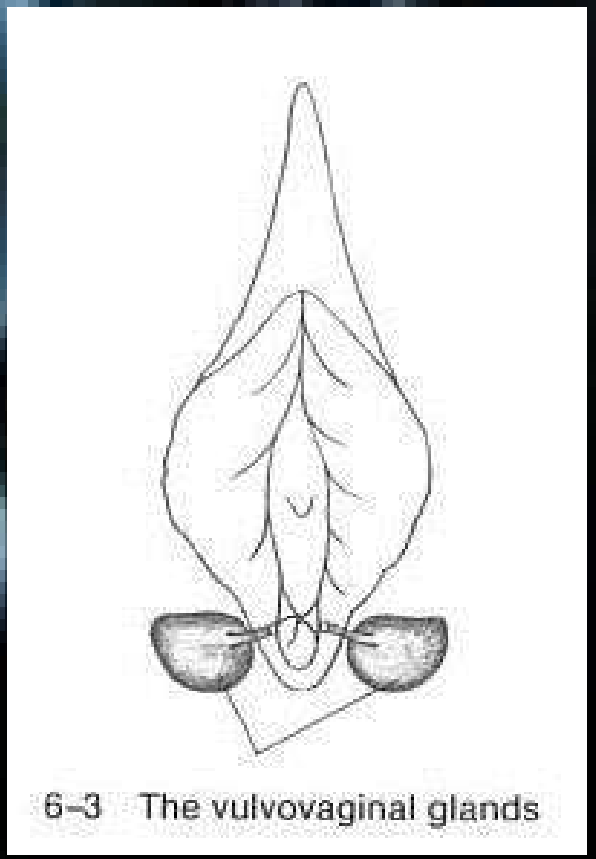
Vagina

- Muscular tube that connects the cervix with the environment
- Function
  - Passage way for menstrual flow
  - Receives sperm and semen from the male
  - Female organ of copulation
  - Birth canal during delivery of the infant



Bartholin's Glands

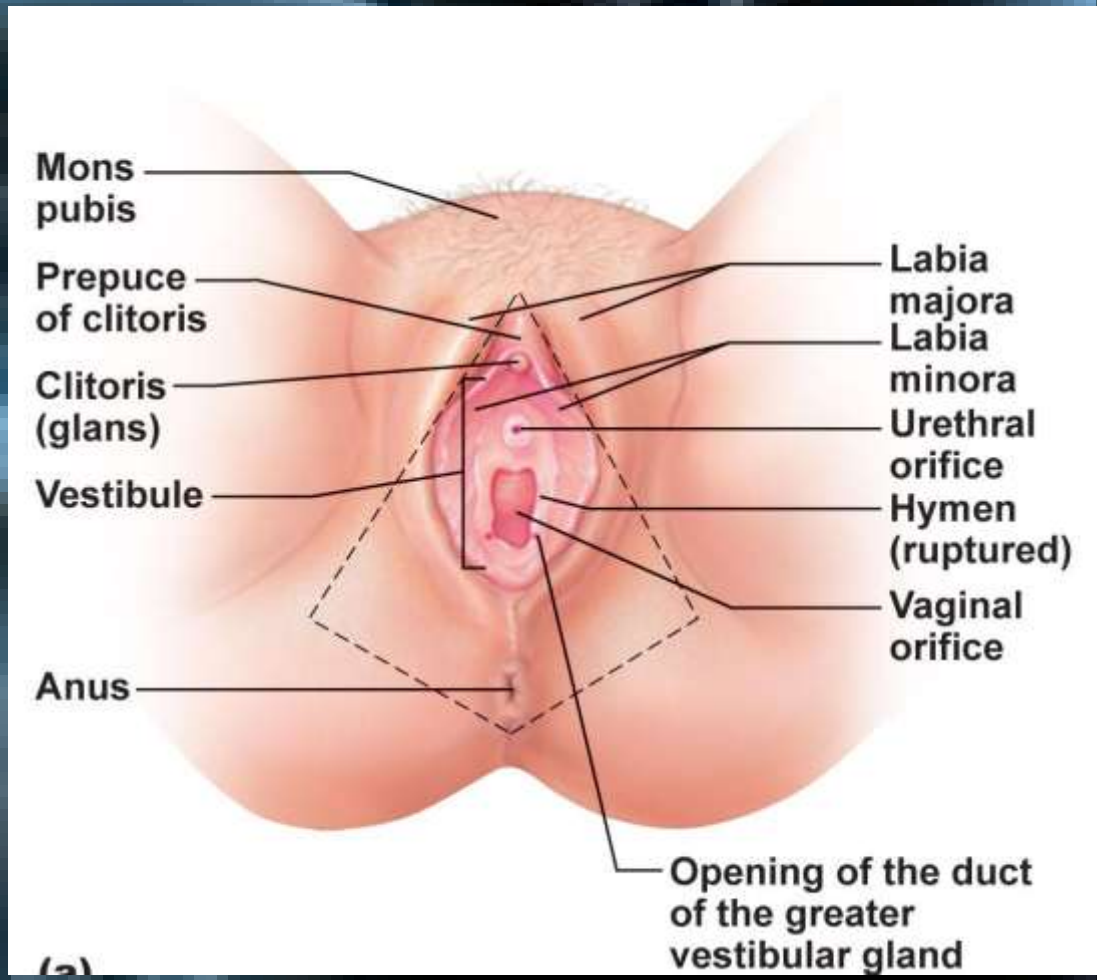
- 2 small glands on either side of the vaginal opening
- Secretes mucous for lubrication during intercourse



6–3 The vulvovaginal glands

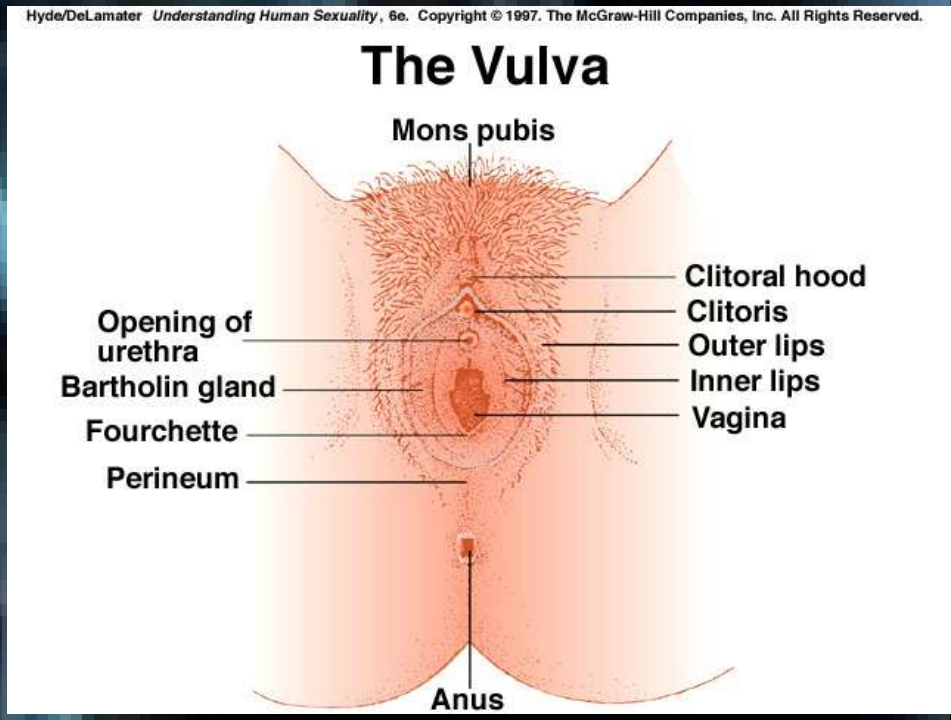
Female Reproductive System

- Vulva, external genitalia
  - Mons pubis
  - Labia majora
  - Labia minora
  - Vaginal orifice
  - Urethral orifice
  - Clitoris
    - Homologous to penis



Vulva

- Collective name for the external female genitalia
- Includes
  - Mons pubis - fat layer
  - Labia majora – outer folds of tissue covered with pubic hair
  - Labia minora – inner folds of tissue
  - Perineum – area between the vagina and anus



THE FEMALE REPRODUCTIVE SYSTEM CHANGES EVERY MONTH FROM THE MENSTRUAL CYCLE, WHICH IS CAUSED BY A VARIETY OF HORMONES THAT FLUCTUATE OVER THE AVERAGE OF 28 DAYS. THE HORMONES INVOLVED INCLUDE LUTENIZING HORMONE AND FOLLICLE STIMULATING HORMONE FROM THE ANTERIOR PITUITARY. PROLACTIN ALSO PLAYS A ROLE IN INCREASING THE SIZE AND PRODUCTION OF THE MAMMARY GLANDS DURING AND AFTER PREGNANCY.

Woman's Cycle

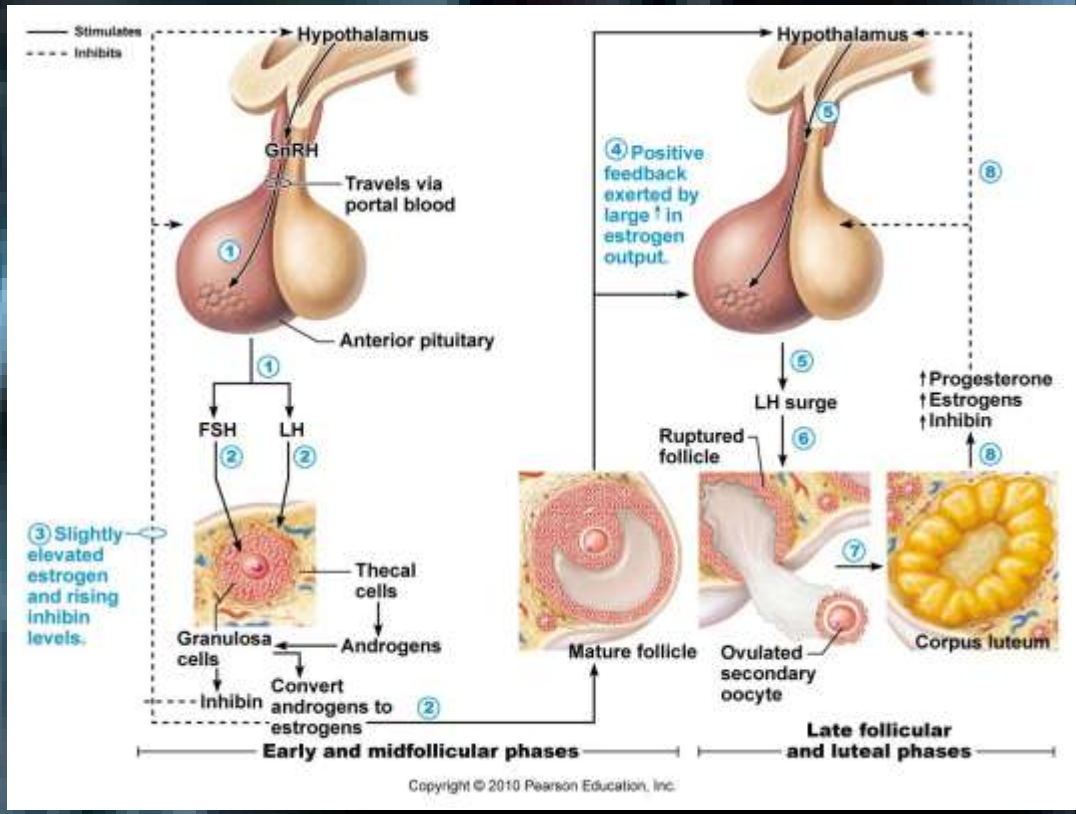
- Day 1 – Menstruation begins (bleeding)
- Day 5 – Menstruation is usually ended
- Day 14 – Ovum has matured and bursts out of the ovary
- Day 15 – After 24 hours the egg is done
- Day 26 – In the absence of fertilization, estrogen/progesterone levels drop and the endometrium lining breads down
- Day 28 – Menstruation begins again.

TIME LINE:

- **Ages 9-12**
  - Secondary sex characteristics appear
- **Ages 11-14**
  - Menstrual cycle begins
- **Late 20-30's**
  - Peak sexual urges
- **Ages 45-55**
  - Menopause (cycle stops, but sex urge continues)

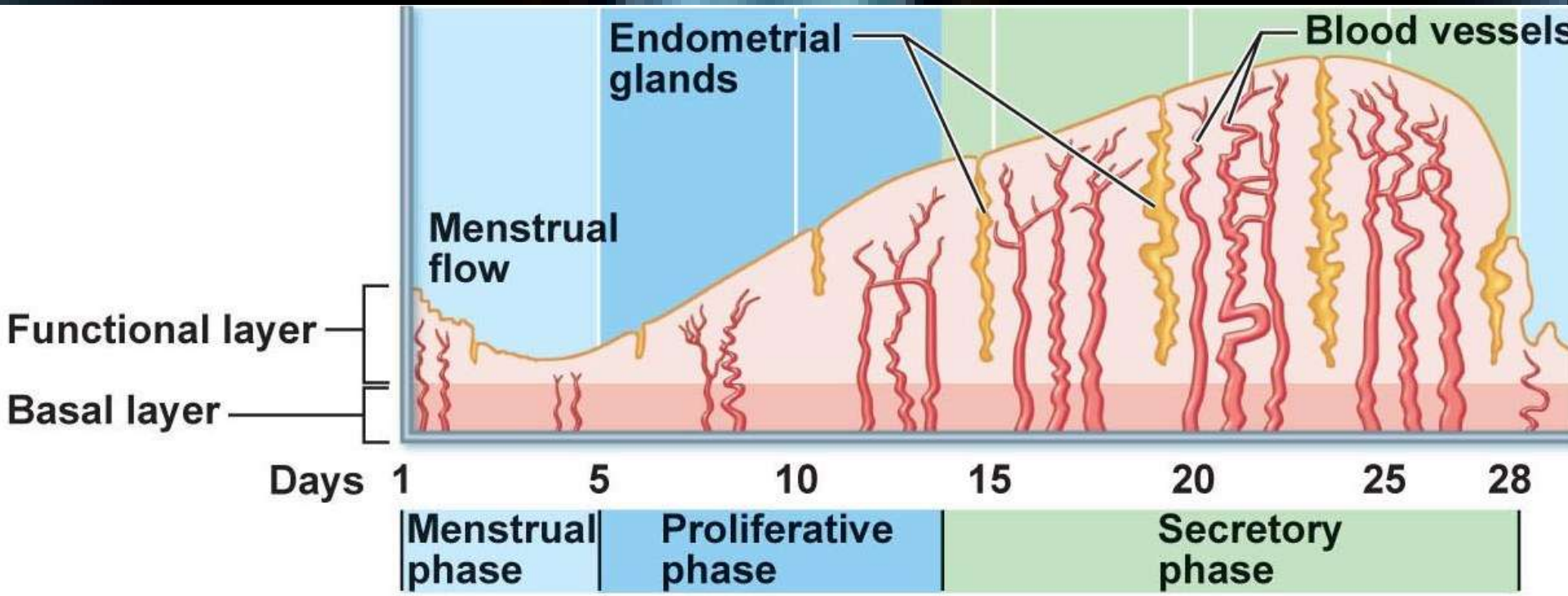
Female Reproductive System

- Ovarian cycle
  - Follicular phase
    - Growth, development of follicles to ovulation.
  - Luteal phase
    - Development & secretion by corpus luteum



Female Reproductive System

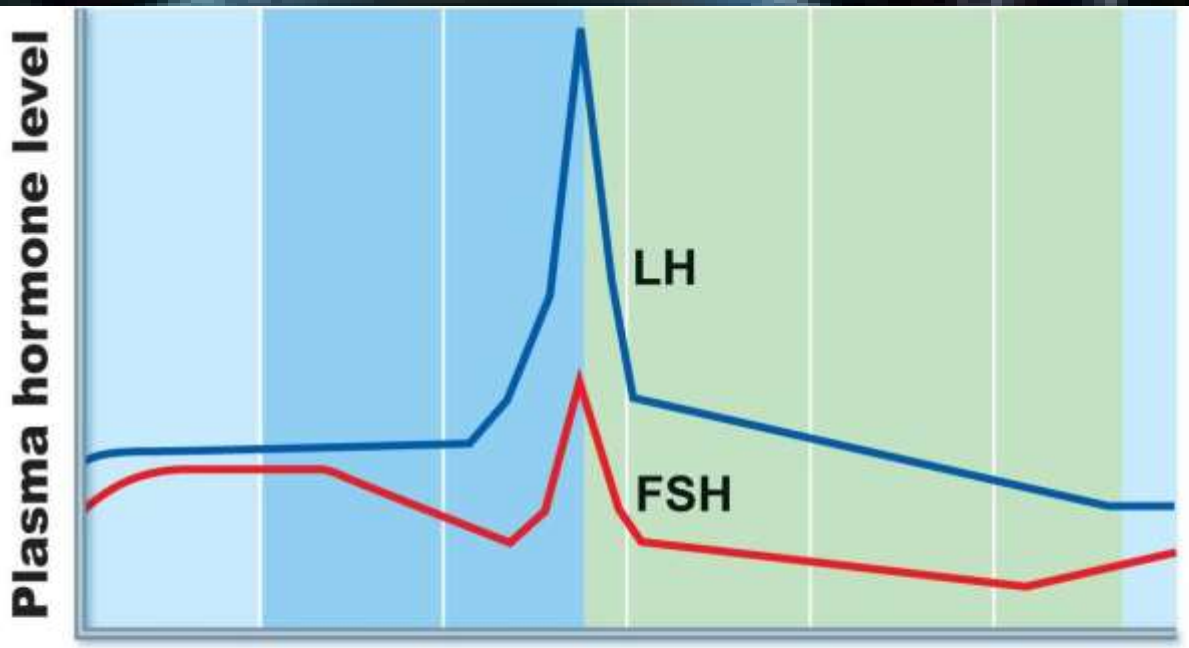
- Uterine cycle
  - Menstrual phase (menses)
  - Proliferative phase
  - Secretory phase



Female Reproductive System

- Endocrine regulation of ovarian & uterine cycles
  - FSH
  - LH
  - Estrogens
  - Progesterone
  - Chorionic gonadotropin

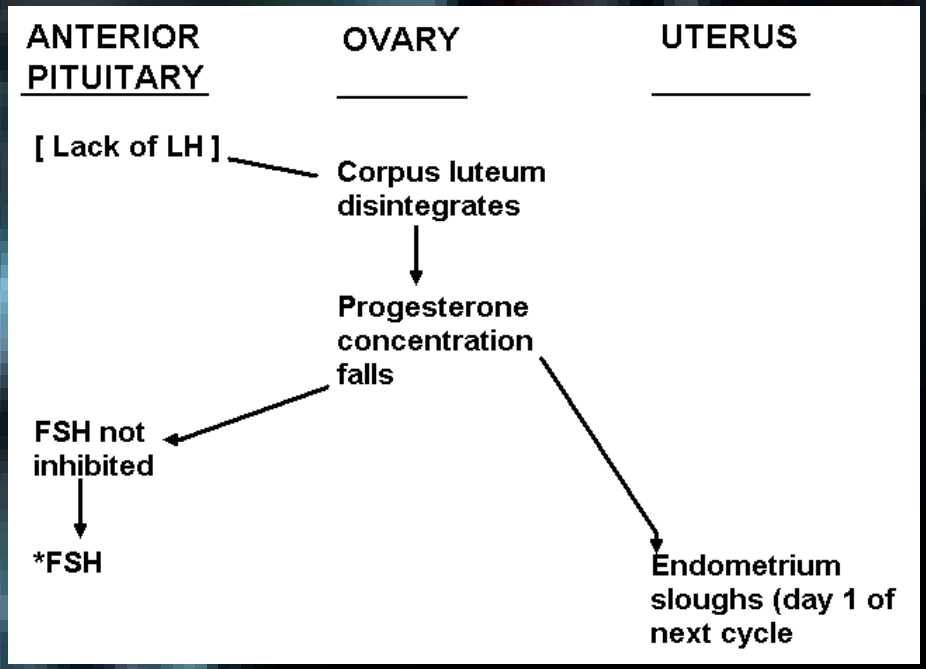
- Endocrine regulation of ovarian & uterine cycles
  - FSH
  - LH



(a) **Fluctuation of gonadotropin levels:** Fluctuating levels of pituitary gonadotropins (follicle-stimulating hormone and luteinizing hormone) in the blood regulate the events of the ovarian cycle.

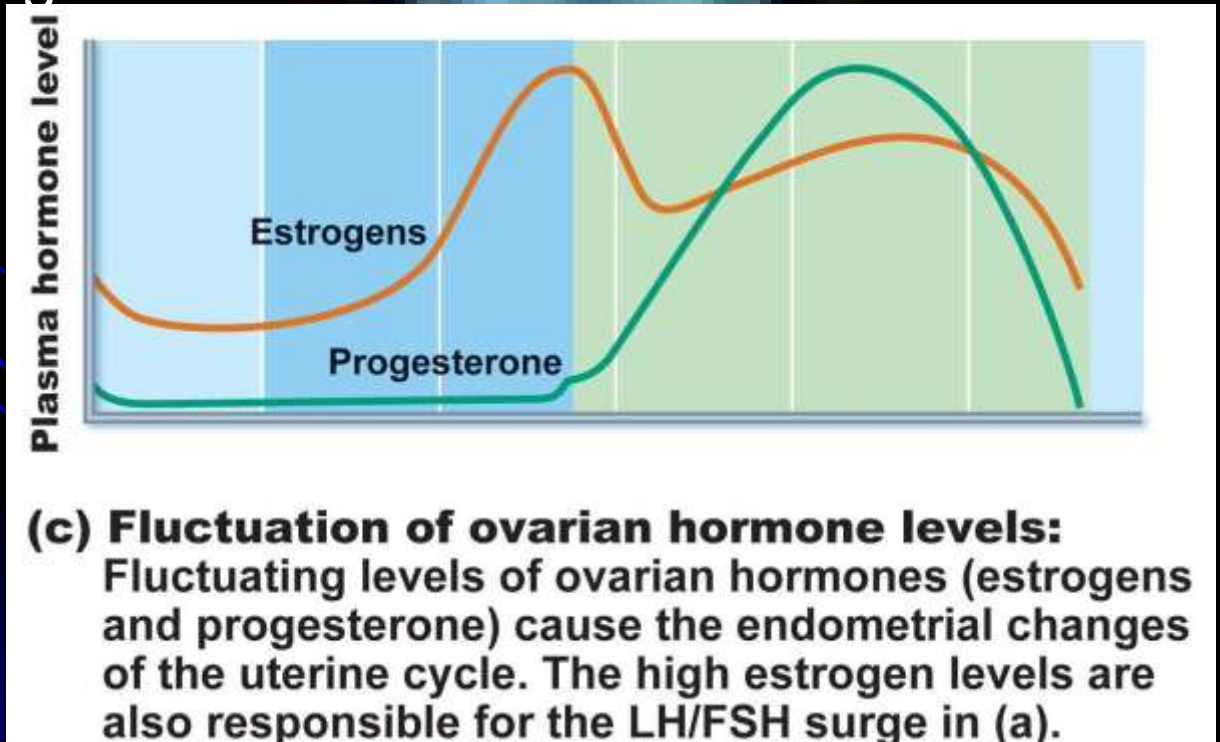
Female Reproductive System

- Endocrine regulation of ovarian & uterine cycles
  - FSH
  - LH
  - Estrogens
  - Progesterone
  - Chorionic gonadotropin



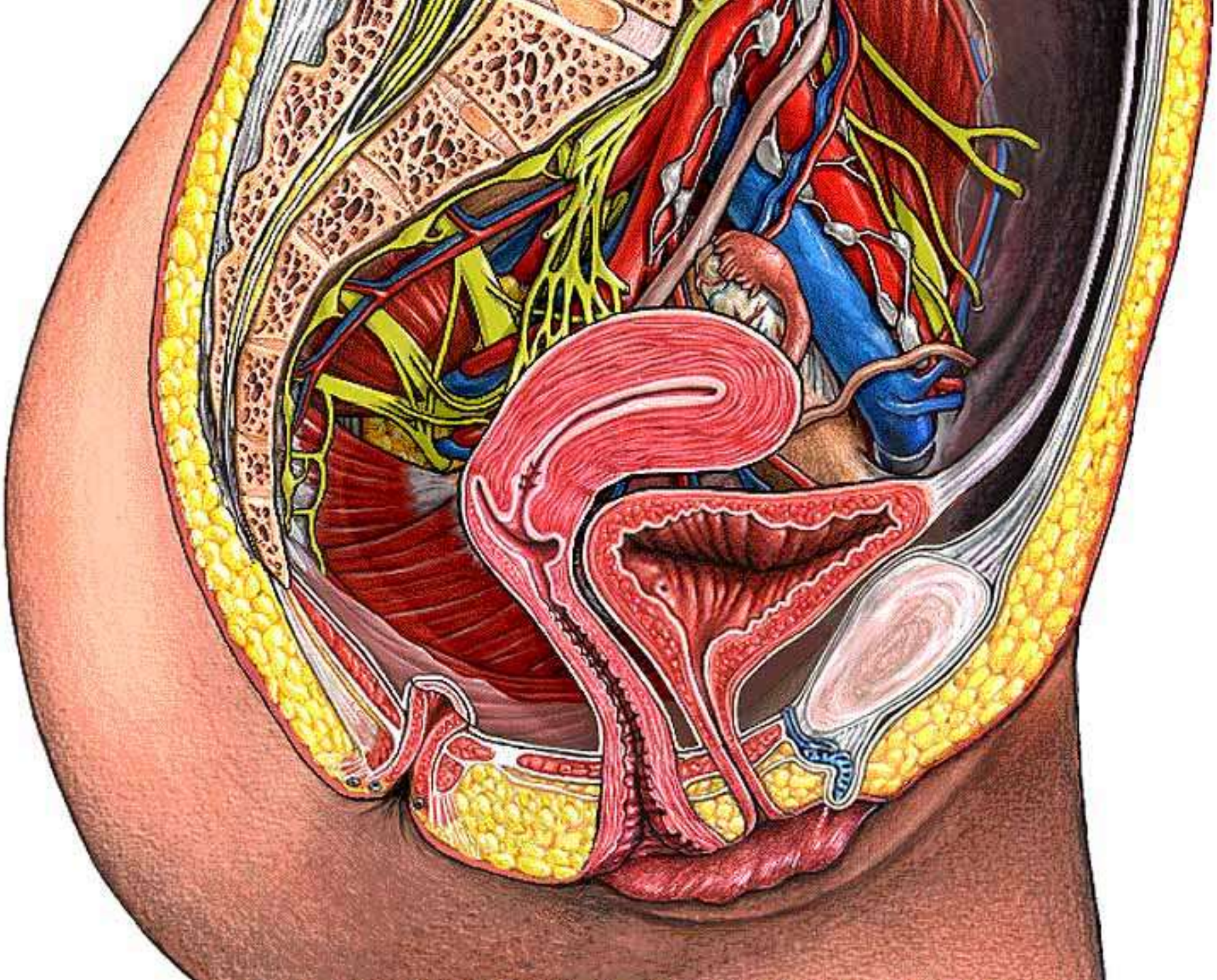
Female Reproductive System

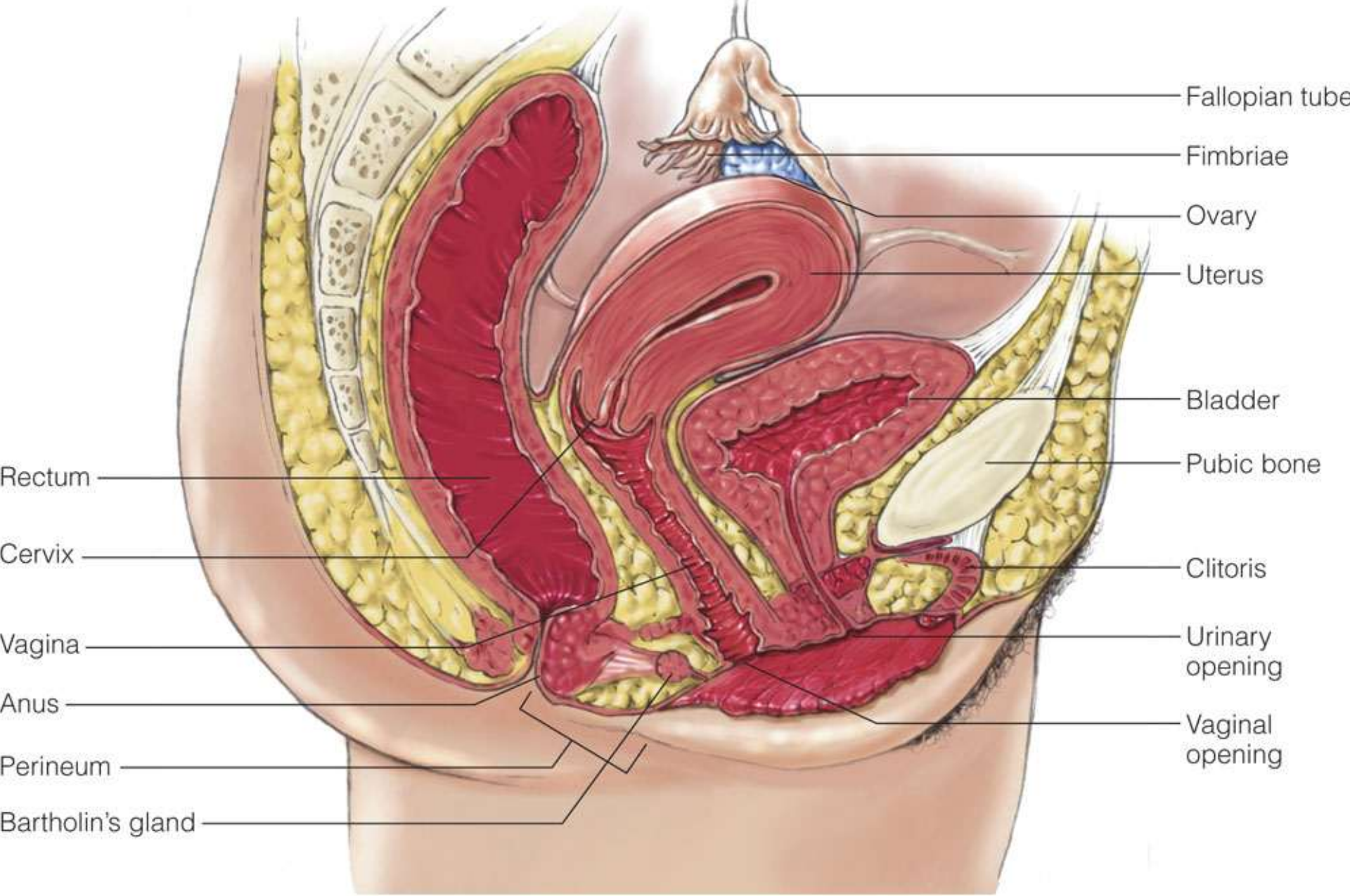
- ovarian & uterine cycles
  - Estrogens
  - Progesterone
- Endocrine regulation of gestation
  - Chorionic gonadotropin



(c) Fluctuation of ovarian hormone levels: Fluctuating levels of ovarian hormones (estrogens and progesterone) cause the endometrial changes of the uterine cycle. The high estrogen levels are also responsible for the LH/FSH surge in (a).

GENITAL ORGANS OR GENITALS, PROVIDING DEVELOPMENT AND OUTPUT GAMETES, ALSO PERFORM AN ENDOCRINE FUNCTION.



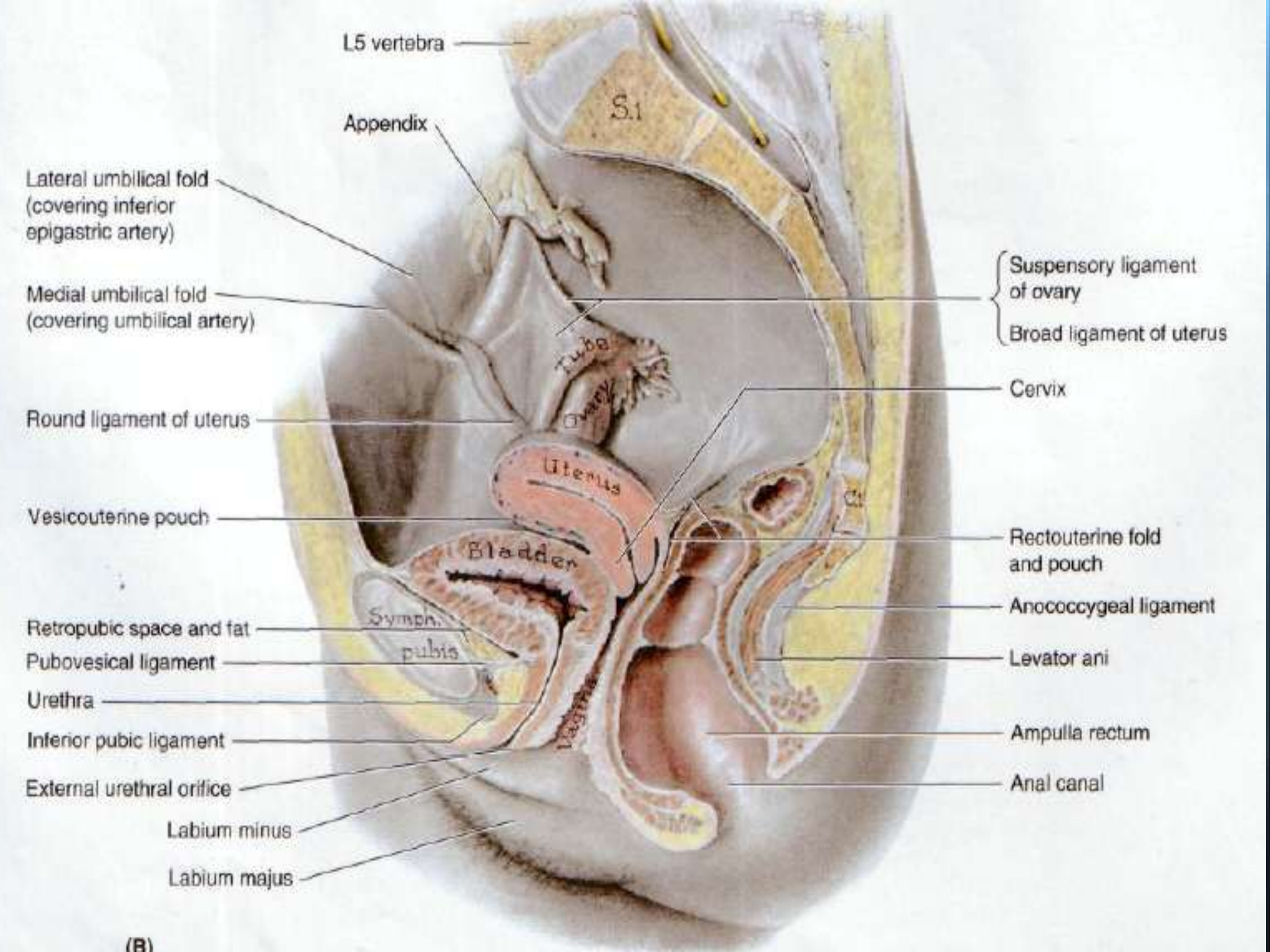


The female internal reproductive system (side view).

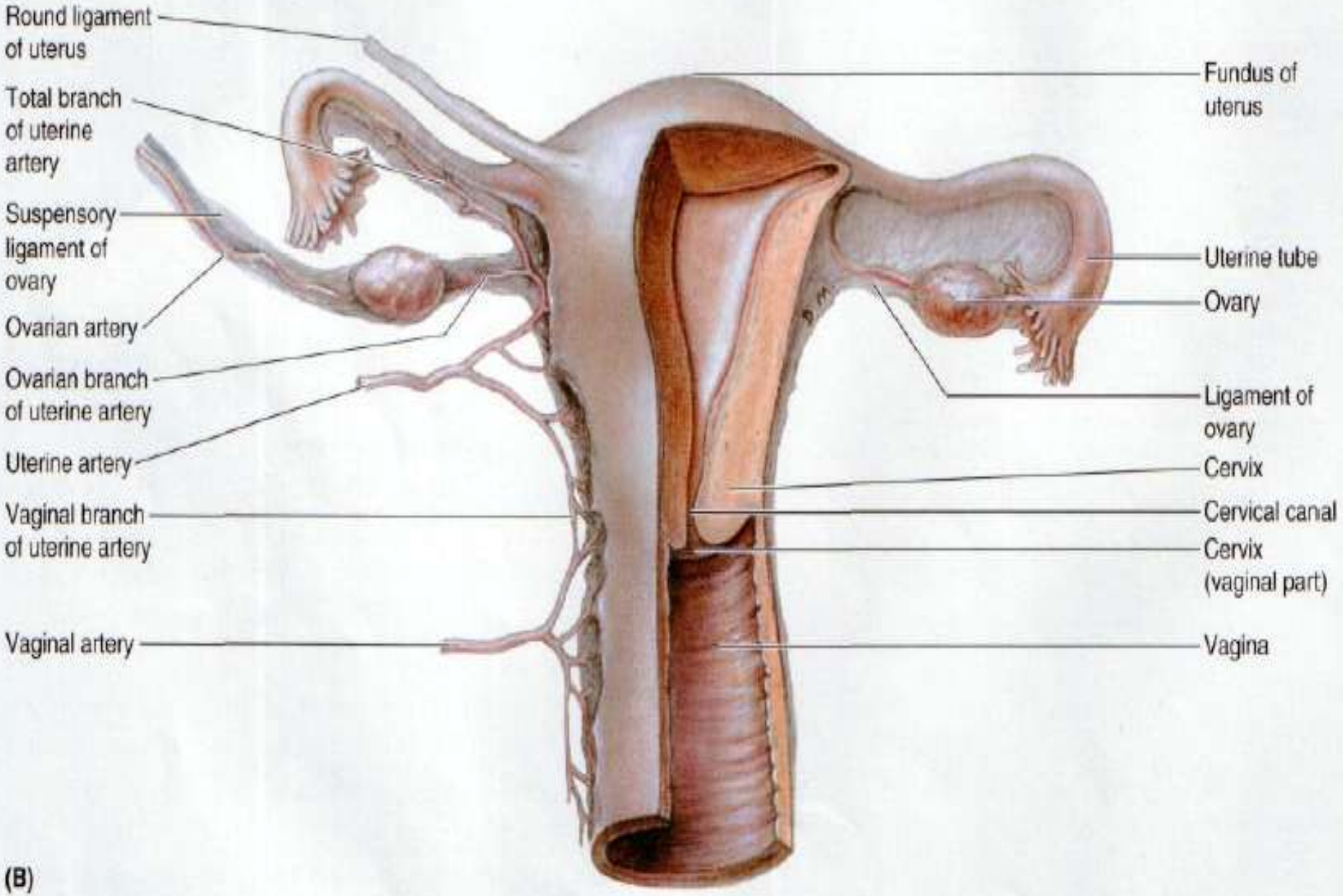
The female reproductive system is designed to carry out several functions. It produces the female egg cells necessary for reproduction, called the ova or oocytes. The system is designed to transport the ova to the site of fertilization. Conception, the fertilization of an egg by a sperm, normally occurs in the fallopian tubes. The next step for the fertilized egg is to implant into the walls of the uterus, beginning the initial stages of pregnancy. If fertilization and/or implantation does not take place, the system is designed to menstruate (the monthly shedding of the uterine lining). In addition, the female reproductive system produces female sex hormones that maintain the reproductive cycle.

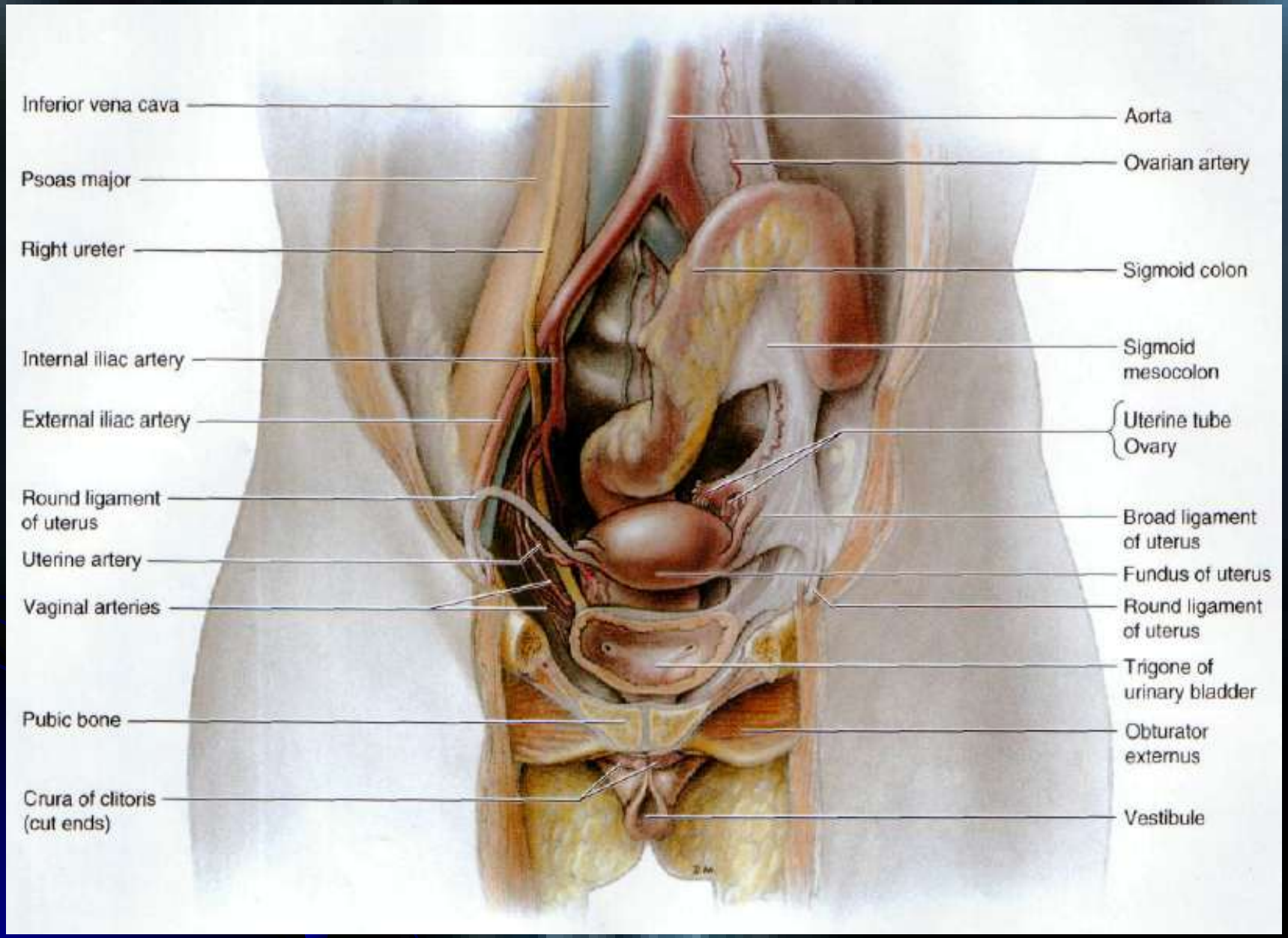
COMPLIANCE WITH FUNCTIONAL PURPOSE IN THE MALE AND FEMALE GENITALS THERE ARE THREE DIVISIONS:

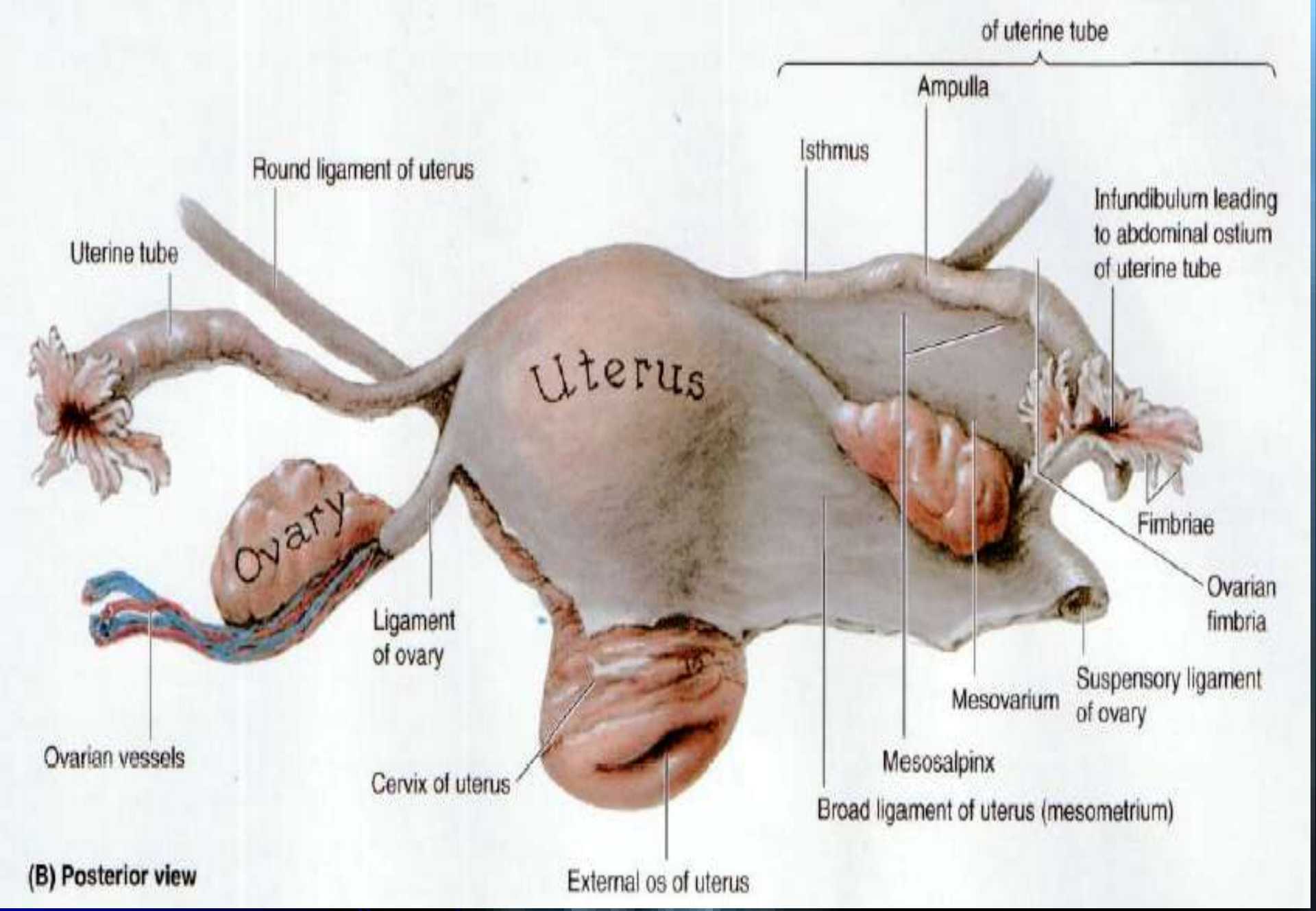
- **GONADS,**
- **GENITAL DUCTS,**
- **COPULATIVE ORGANS**.

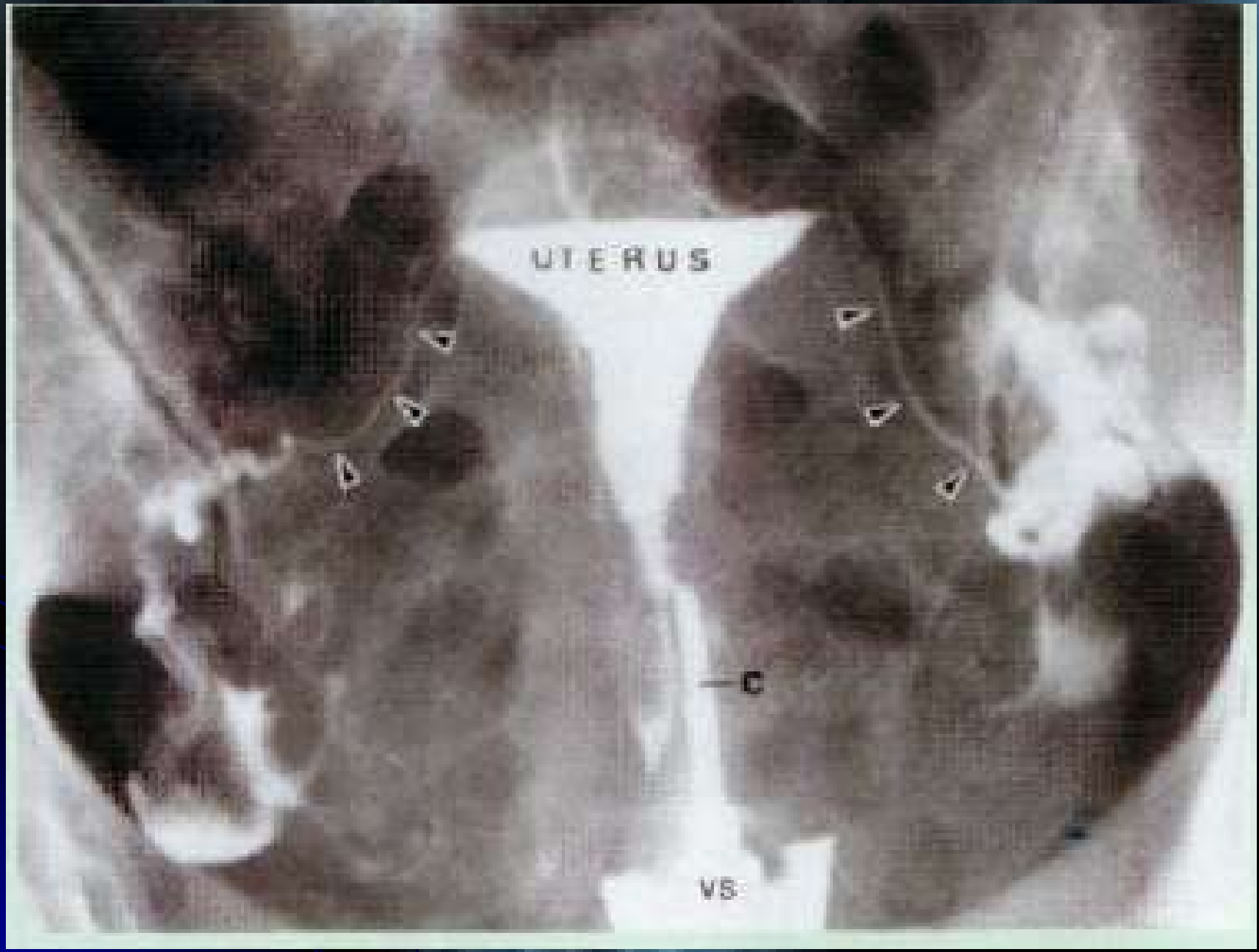

L5 vertebra
S1
Appendix
Lateral umbilical fold (covering inferior epigastric artery)
Medial umbilical fold (covering umbilical artery)
Round ligament of uterus
Vesicouterine pouch
Retropubic space and fat
Pubovesical ligament
Urethra
Inferior pubic ligament
External urethral orifice
Labium minus
Labium majus
Suspensory ligament of ovary
Broad ligament of uterus
Cervix
Rectouterine fold and pouch
Anococcygeal ligament
Levator ani
Ampulla rectum
Anal canal
Tube
Ovary
Uterus
Bladder
Symph. pubis
Vagina

(B)


Round ligament of uterus
Total branch of uterine artery
Suspensory ligament of ovary
Ovarian artery
Ovarian branch of uterine artery
Uterine artery
Vaginal branch of uterine artery
Vaginal artery
Fundus of uterus
Uterine tube
Ovary
Ligament of ovary
Cervix
Cervical canal
Cervix (vaginal part)
Vagina
(B)


Inferior vena cava
Psoas major
Right ureter
Internal iliac artery
External iliac artery
Round ligament of uterus
Uterine artery
Vaginal arteries
Pubic bone
Crura of clitoris (cut ends)
Aorta
Ovarian artery
Sigmoid colon
Sigmoid mesocolon
Uterine tube
Ovary
Broad ligament of uterus
Fundus of uterus
Round ligament of uterus
Trigone of urinary bladder
Obturator externus
Vestibule


of uterine tube
Ampulla
Isthmus
Round ligament of uterus
Infundibulum leading to abdominal ostium of uterine tube
Uterine tube
Uterus
Ovary
Fimbriae
Ligament of ovary
Ovarian fimbria
Suspensory ligament of ovary
Mesovarium
Ovarian vessels
Mesosalpinx
Cervix of uterus
Broad ligament of uterus (mesometrium)
External os of uterus
(B) Posterior view


UTERUS
C
VS

FEMALE GENITAL ORGANS

FEMALE REPRODUCTIVE SYSTEM

THE INTERNAL GENITAL (ORGANA GENITALIA INTERNA):

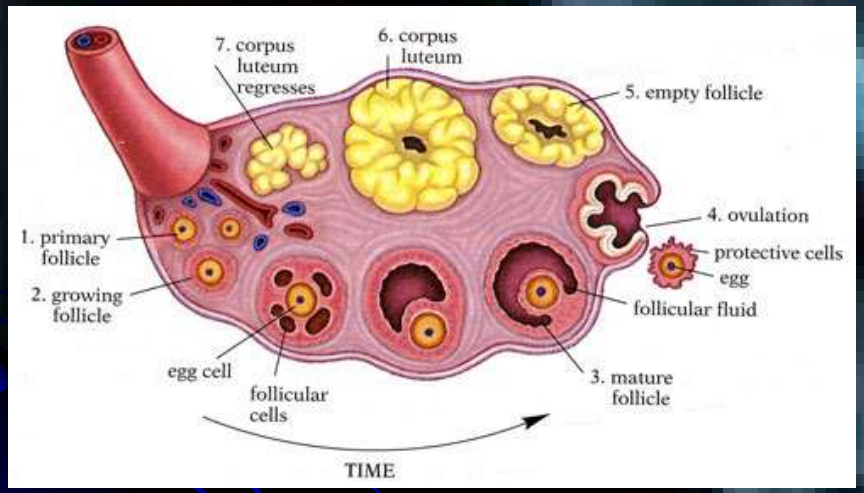
- OVARIES (OVARIA)
- FALLOPIAN TUBES (SALPINGES)
- THE UTERUS
- VAGINA

PUDENDA (ORGANA GENITALIA EXTERNA):

- VULVA (VULVA);

- CLITORIS (CLITORIS)

OVARY



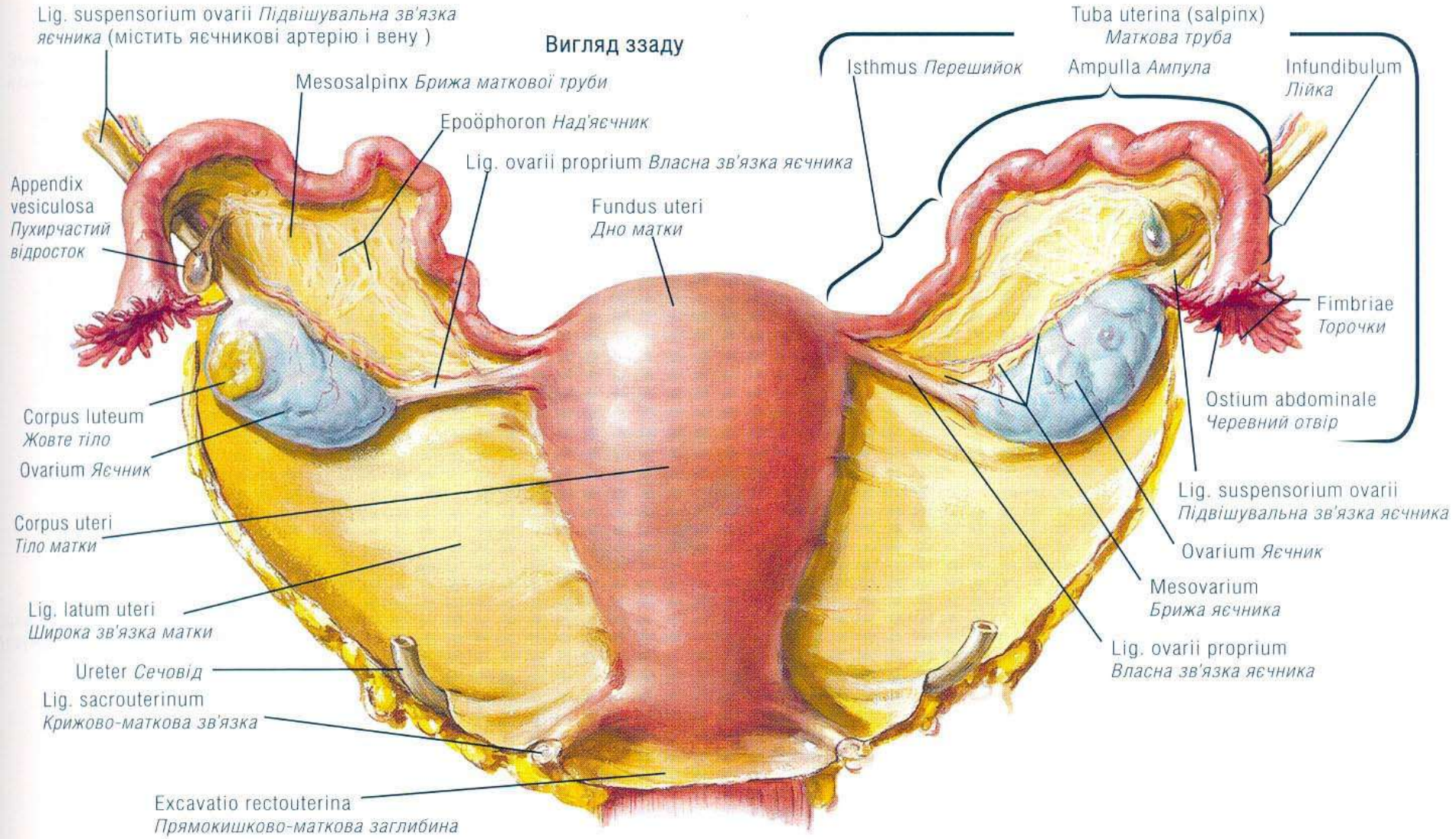
OVARIES ARE PART OF THE FEMALE REPRODUCTIVE SYSTEM. NORMALLY, A FEMALE HAVE TWO OVARIES, EACH OF THEM IS PERFORMING TWO MAJOR FUNCTIONS: PRODUCING EGGS, OR (EXOCRINE FUNCTION) AND SECRETING HORMONES, OR (ENDOCRINE SYSTEM). OVARIES IN FEMALES ARE HOMOLOGOUS TO TESTES IN MALES. THE TERM GONADS REFER TO THE OVARIES IN FEMALES AND TESTES IN MALES.

OVARY

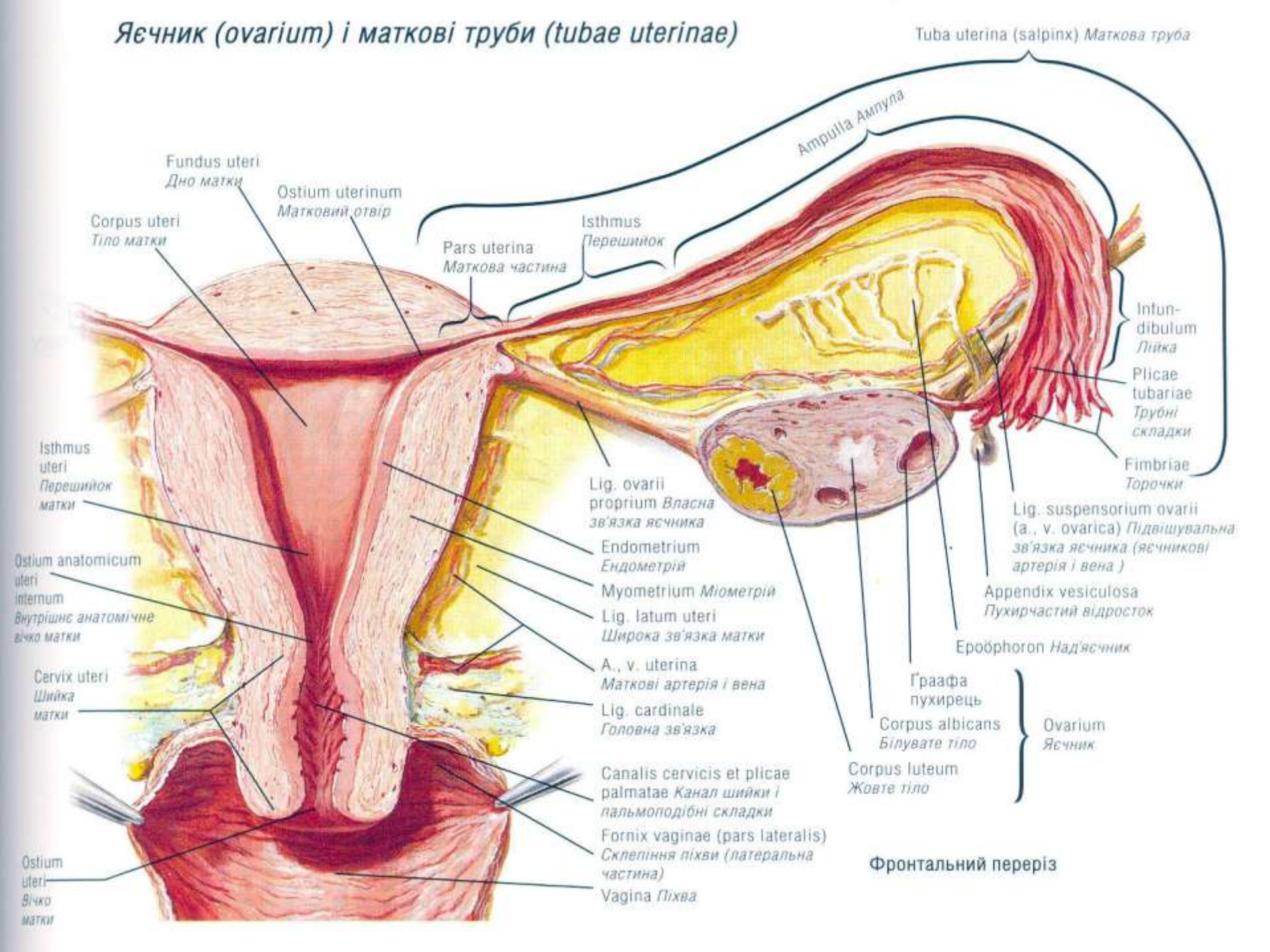
(OVARIUM S. OOPHORON)

THE OVARIES ARE THE ORGANS OF THE FORMATION OF GERM CELLS AND THE PRODUCTION OF SEX HORMONES; IN FUNCTIONAL-TERM RESPECT OVARY PLAYS A LEADING ROLE IN THE REPRODUCTIVE SYSTEM WOMEN.

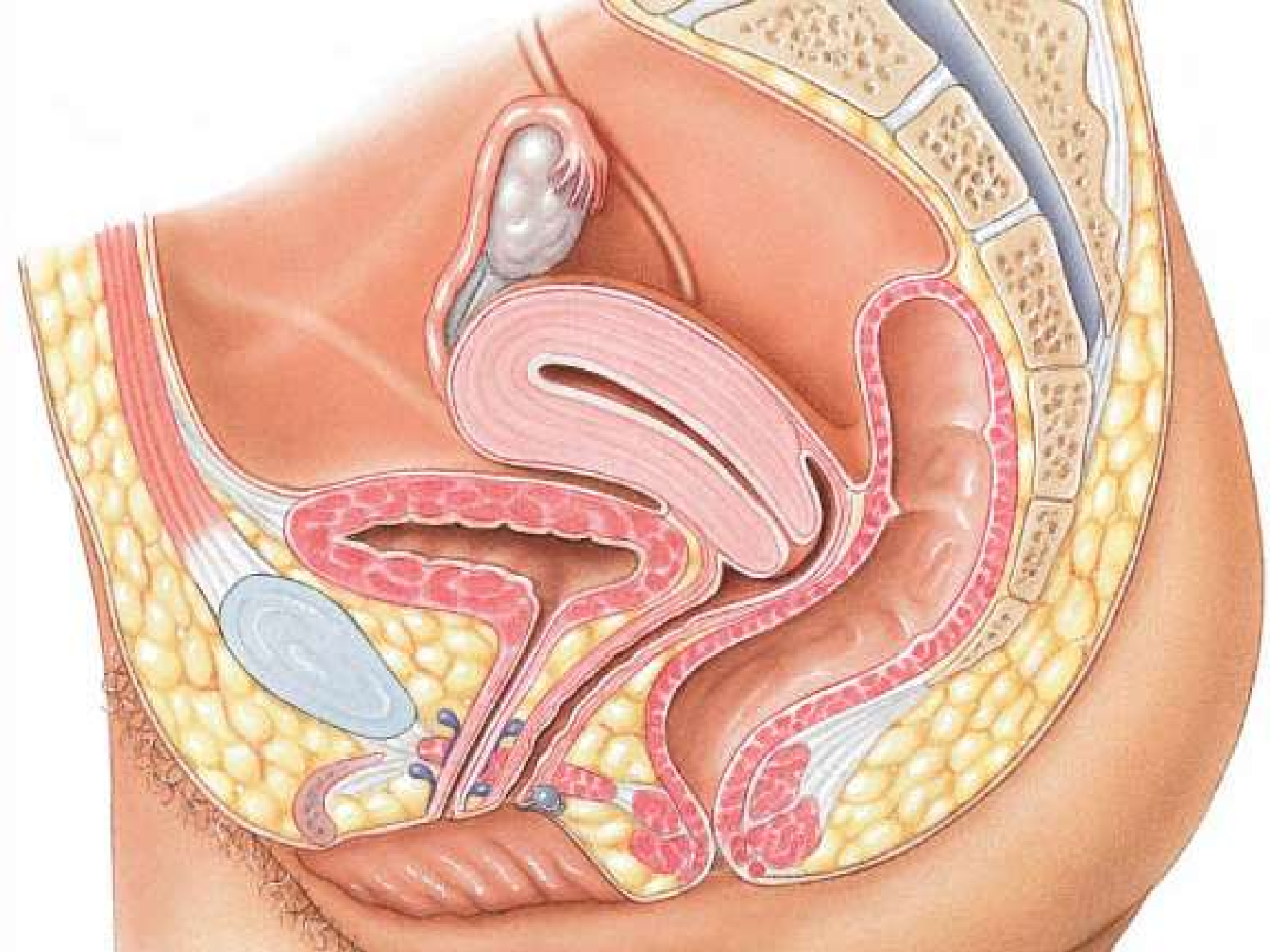
Яєчник (ovarium) і маткові труби (tubae uterinae)

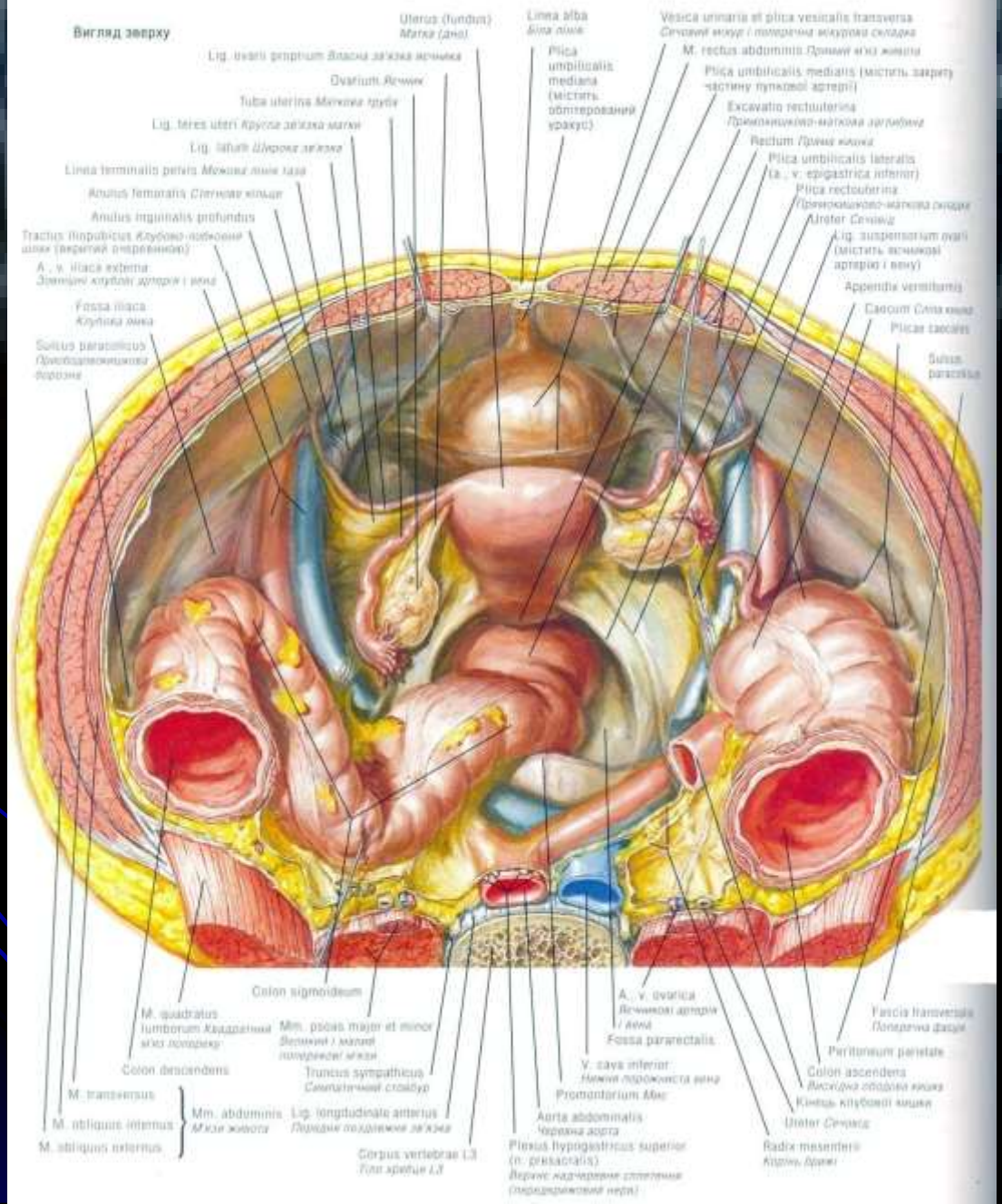


Яєчник (ovarium) і маткові труби (tubae uterinae)



Фронтальний переріз



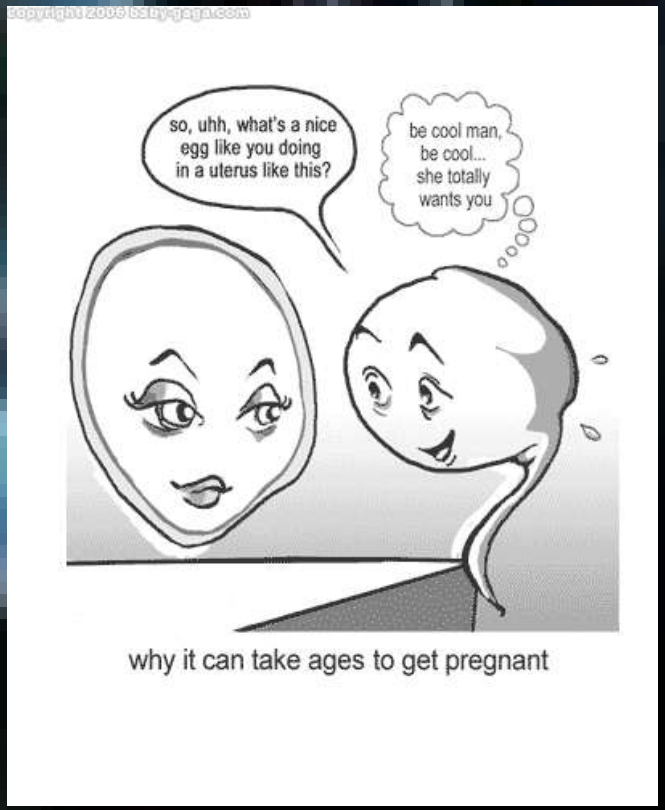

Вигляд зверху
Uterus (fundus)
Матка (дно)
Linea alba
Біла лінія
Vesica urinaria et plica vesicalis transversa
Сечовий міхур і поперечна міхурова складка
M. rectus abdominis Прямий м'яз живота
Plica umbilicalis mediana (містить облітерований уракус)
Plica umbilicalis medialis (містить закриту частину пупкової артерії)
Excavatio rectouterina
Прямокишково-маткова заглибина
Rectum Пряма кишка
Plica umbilicalis lateralis (a., v. epigastrica inferior)
Plica rectouterina
Прямокишково-маткова складка
Ureter Сечовід
Lig. suspensorium ovarii (містить яєчникові артерію і вену)
Appendix vermiformis
Caecum Сліпа кишка
Plicae caecales
Sulcus paracolicus
Lig. ovarii proprium Власна зв'язка яєчника
Ovarium Яєчник
Tuba uterina Маткова труба
Lig. teres uteri Кругла зв'язка матки
Lig. latum Широка зв'язка
Linea terminalis pelvis Межова лінія таза
Anulus femoralis Стегнове кільце
Anulus inguinalis profundus
Tractus iliopubicus Клубово-лобкова шлея (вкритий очеревиною)
A., v. iliaca externa
Зовнішні клубові артерія і вена
Fossa iliaca
Клубова ямка
Sulcus paracolicus
Прикободовищкова борозна
Colon sigmoideum
M. quadratus lumborum Квадратний м'яз поперику
Mm. psoas major et minor Великий і малий поперекові м'язи
A., v. ovarica
Яєчникові артерія і вена
Fossa pararectalis
Fascia transversalis
Поперечна фасція
Peritoneum parietale
Colon descendens
Truncus sympathicus
Симпатичний стовбур
V. cava inferior
Нижня порожниста вена
Colon ascendens
Висхідна ободова кишка
Promontorium Мис
Кінець клубової кишки
M. transversus
M. obliquus internus
M. obliquus externus
Mm. abdominis
М'язи живота
Lig. longitudinale anterius
Передня поздовжня зв'язка
Aorta abdominalis
Черевна аорта
Ureter Сечовід
Corpus vertebrae L3
Тіло хребця L3
Plexus hypogastricus superior (n. presacralis)
Верхнє надчревне сплетення (прекрижовий нерв)
Radix mesenterii
Корінь брижі

MEDULLA CONSISTS OF CONNECTIVE TISSUE IN IT BRANCHED VESSELS AND NERVES (VASCULAR ZONE). CORTEX CITIES IN NEWBORNS IN BOTH OVARIES 2 MILLION. PRIMARY FOLLICLES, WHICH ARE EMBRYO EGGS.

THE OVARIES ARE IN THE PERITONEAL CAVITY, THEY HAVE PROTEIN SHELL AND COATED THE OUTSIDE SURFACE EPITHELIUM. IN THE OVARY DISTINGUISH CORTICAL AND MEDULLA. THE BOUNDARY BETWEEN THEM IS NOT CLEARLY EXPRESSED.

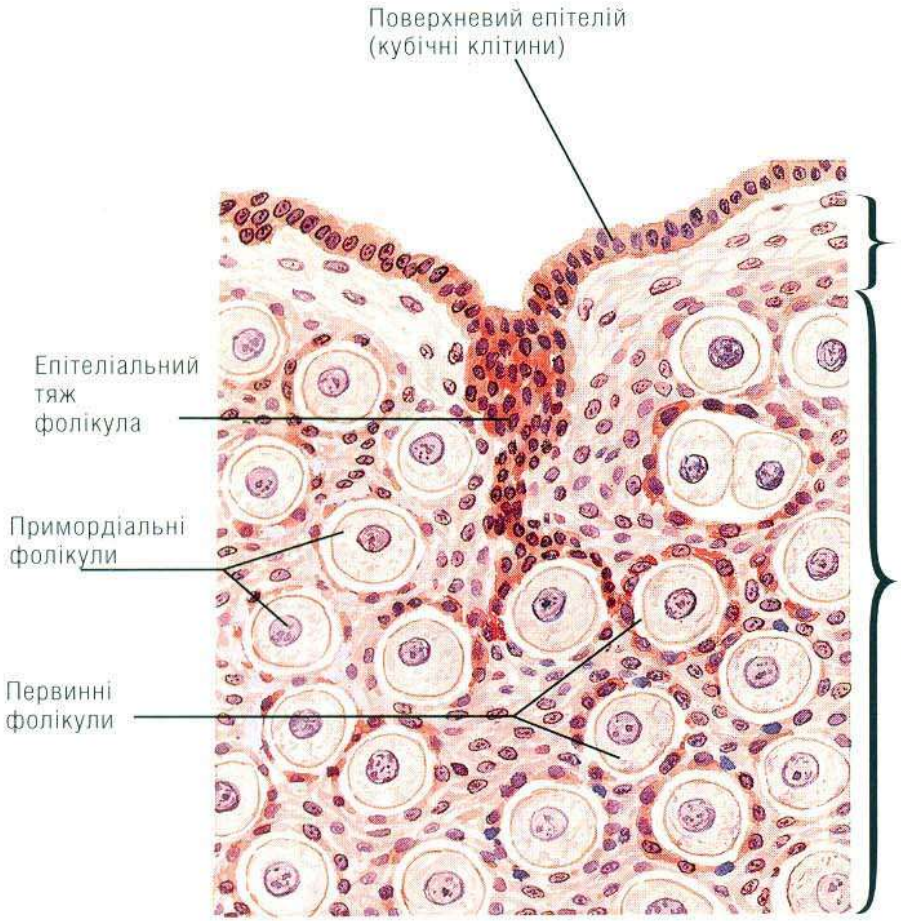
Ova

- The female reproductive cell.
- They are the largest cells in the female body. (about the size of a grain of sand.)
- The female baby is born with all the ova she will ever have (about 200,000 in each ovary).
- About 400-500 ova mature and are released over a lifetime

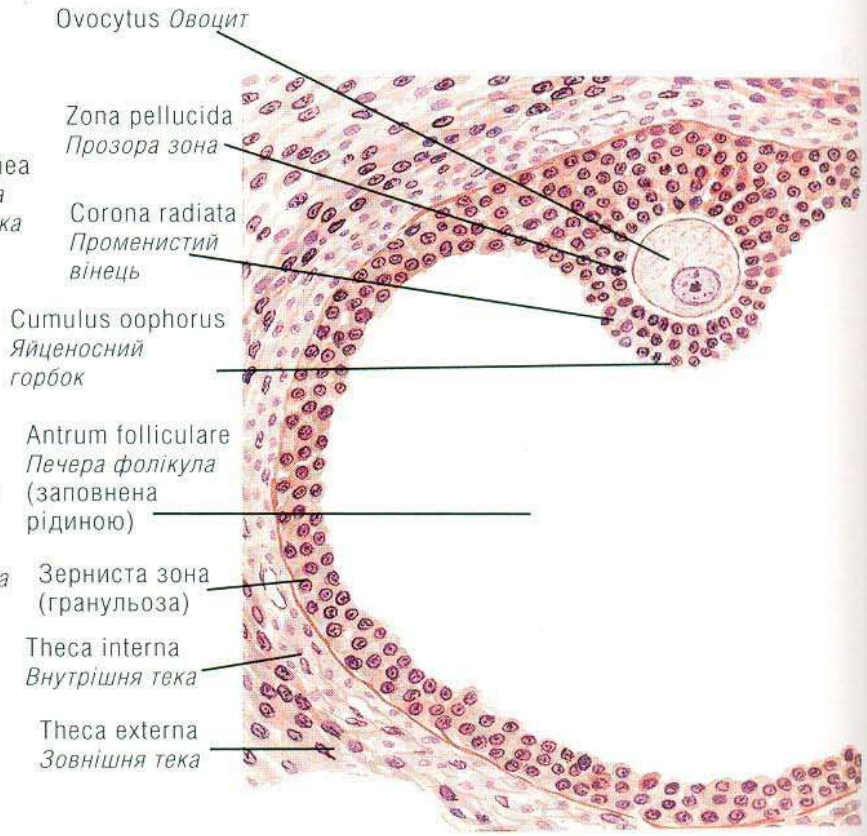


Click here

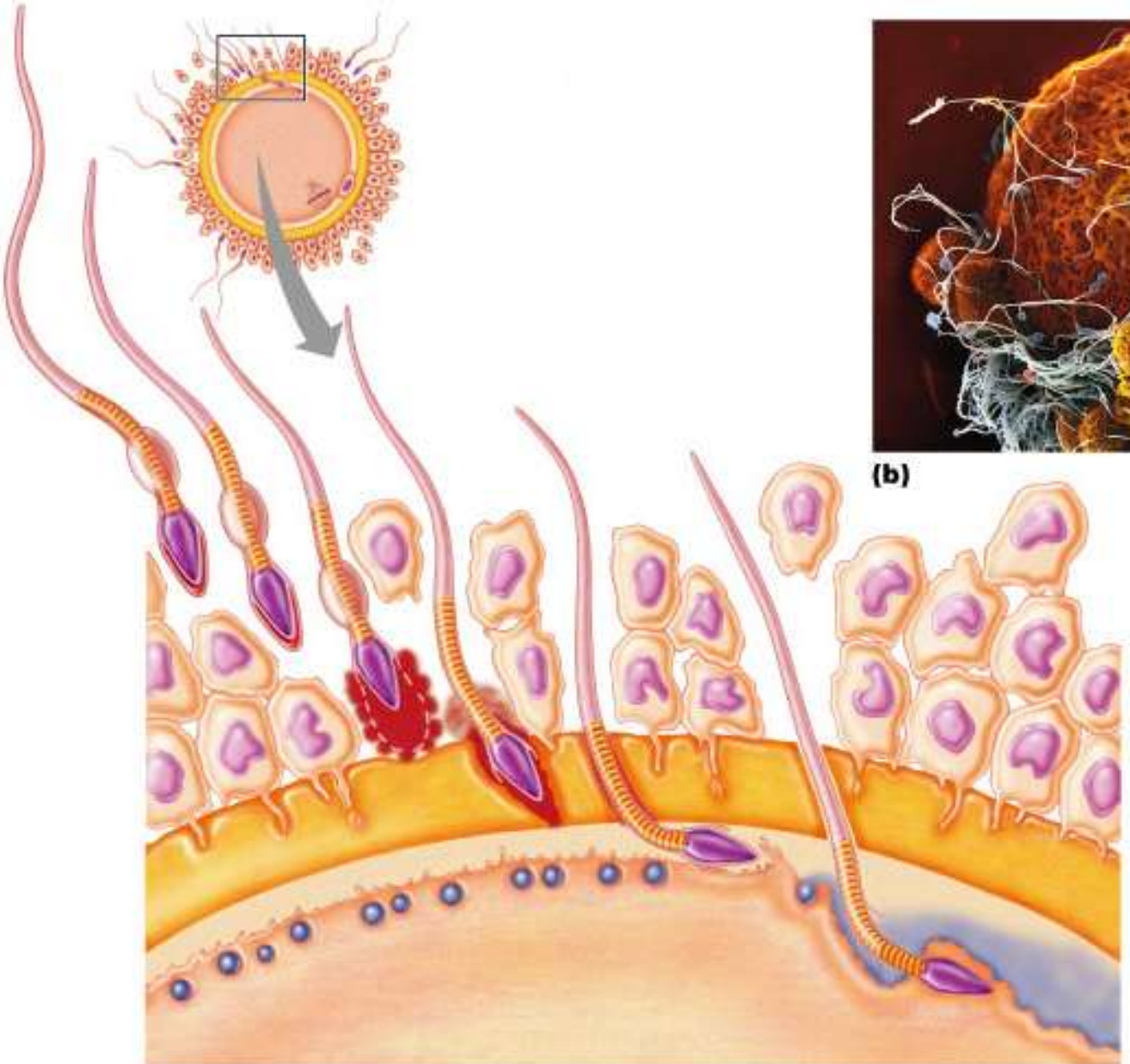
Яєчник, яйцеклітини і фолікули



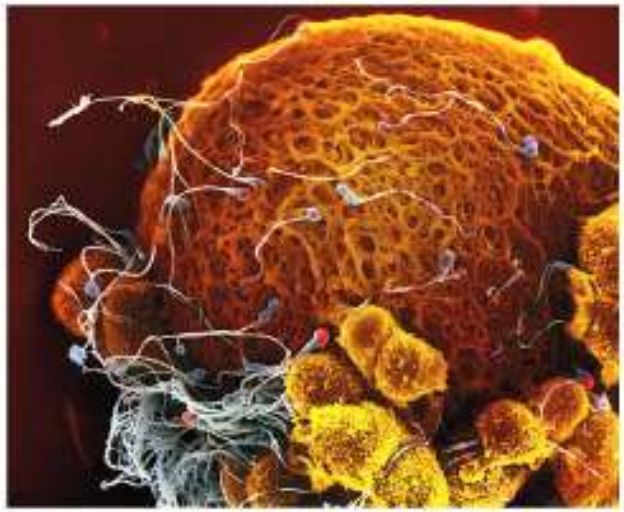
Яєчник новонародженої



Будова зрілого фолікула



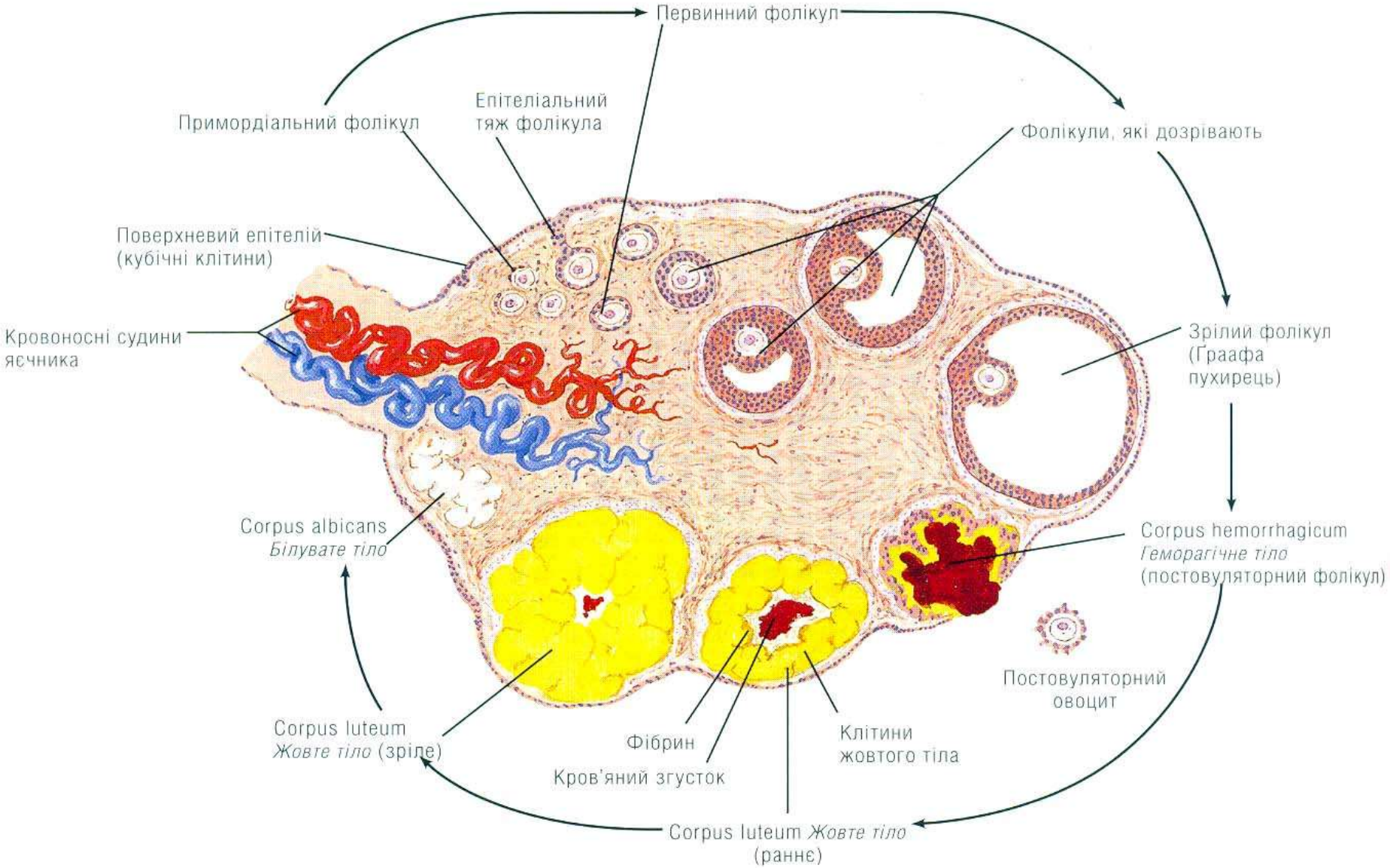
(a)



(b)

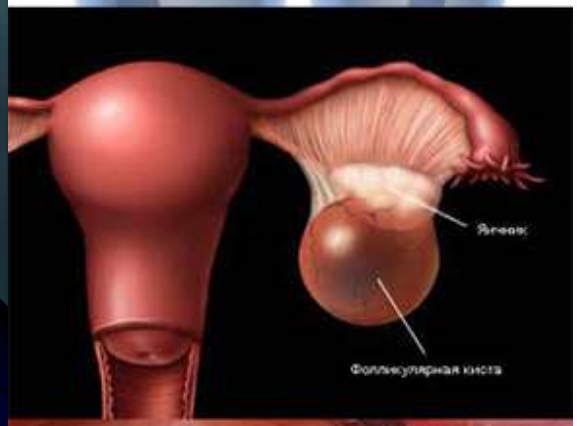
DURING THE REPRODUCTIVE PERIOD THAT CONTINUES IN WOMEN FROM THE ONSET OF MENARCHE TO 40-50 YEARS, TIME TO MATURE NO MORE THAN 400-500 EGGS.

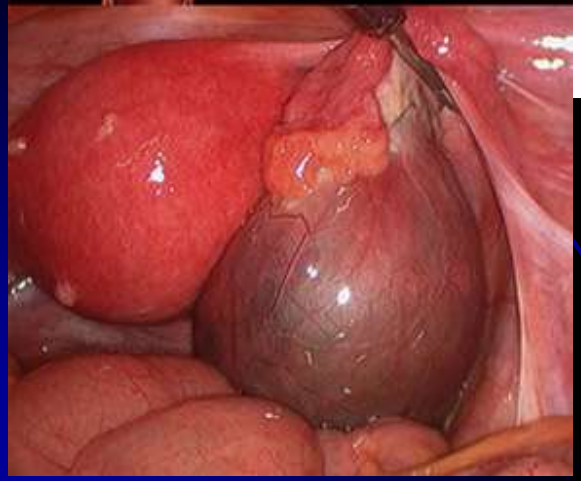
CYCLICAL CHANGES IN OVARIAN RELATED OVULATION AND CORPUS LUTEUM FORMATION, UNDER THE CONTROL OF GONADOTROPIN HORMONE AND ACCOMPANIED BY THE PRODUCTION OF HORMONES, WHICH CAUSE CHANGES IN THE UTERUS, ASSOCIATED WITH MENSTRUAL CYCLE AND PREGNANCY.



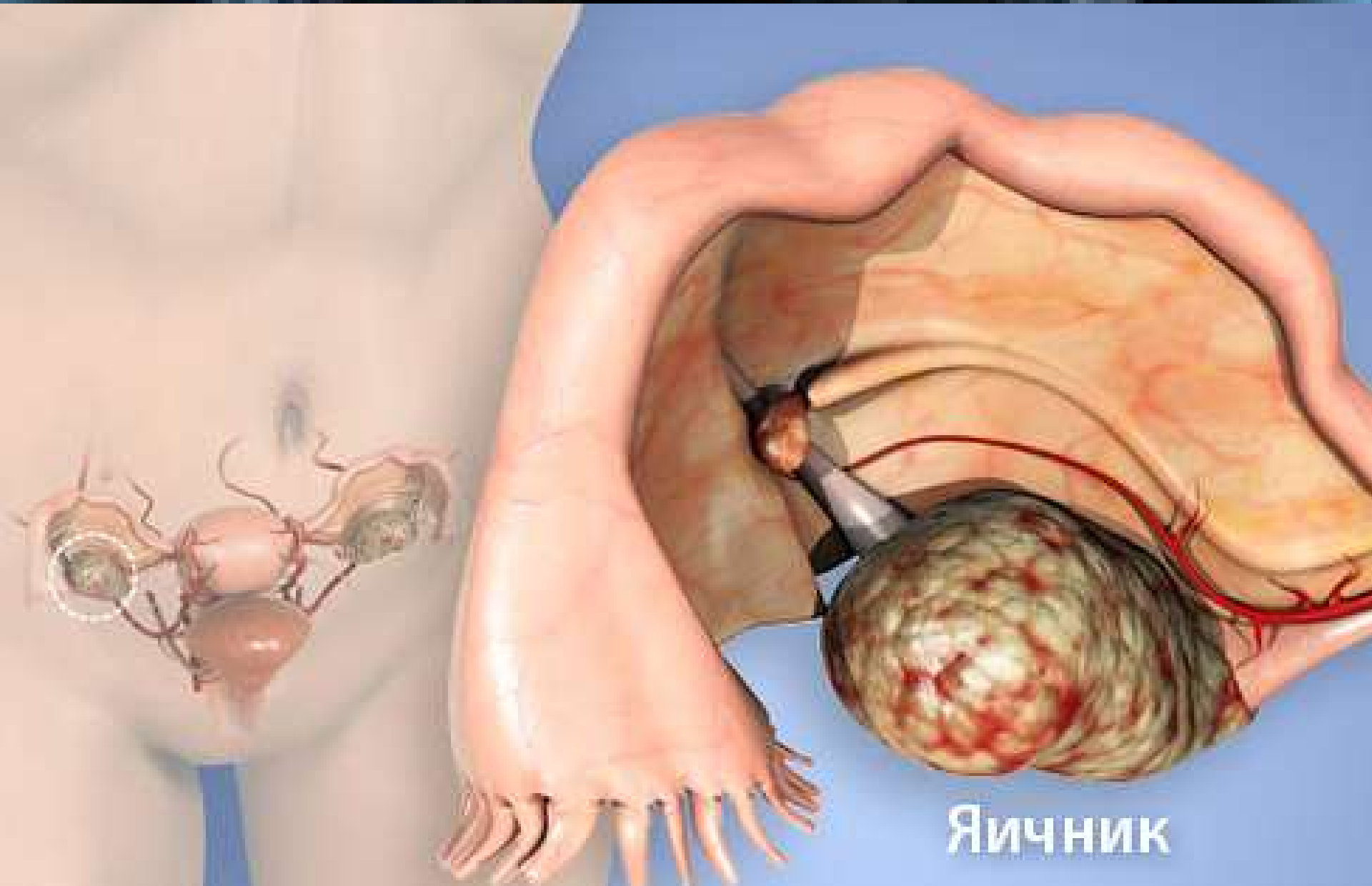
Оваріальний (яєчниковий) цикл

Ovarium brush





Ovarium cancer



FALLOPIAN TUBES

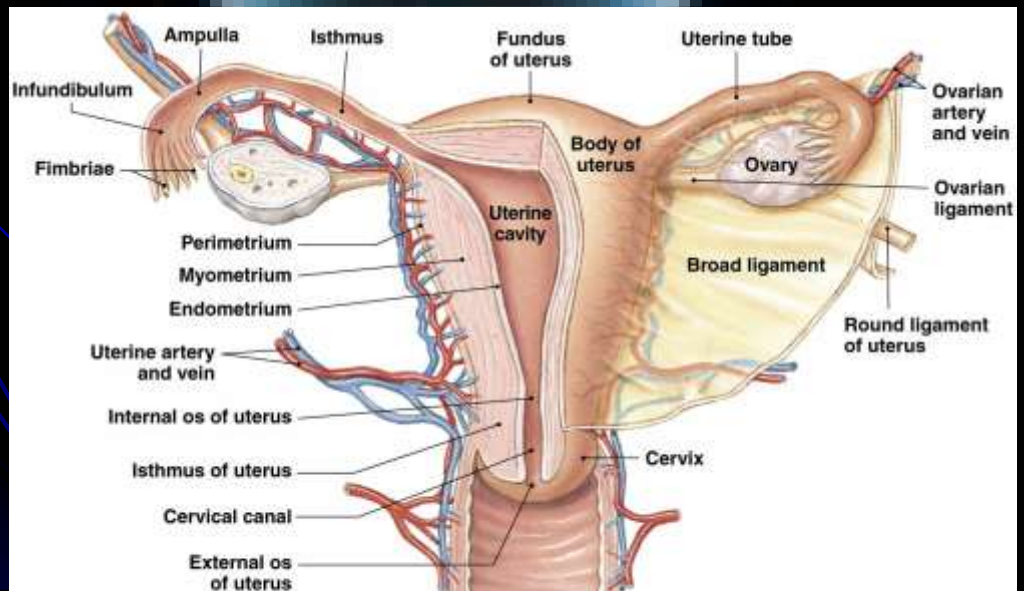
(TUBA UTERINA;
s. SALPINX,
s. OVIDUCTUS)

The Uterine Tubes

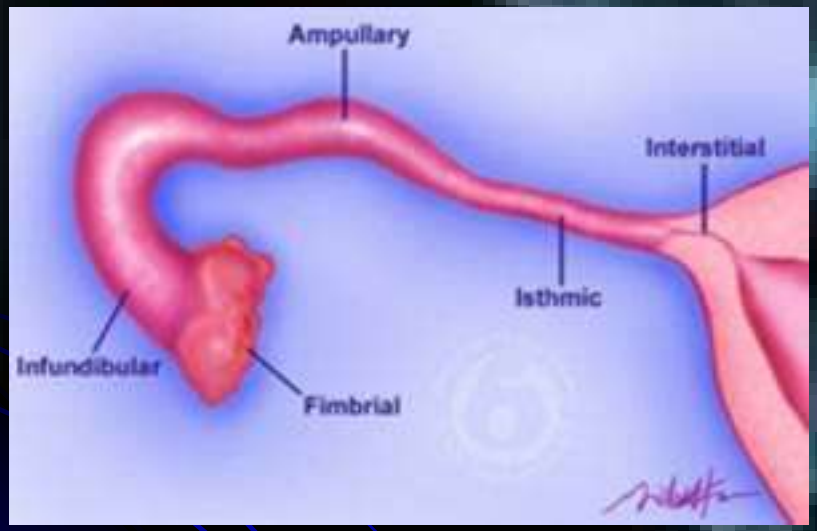
- Fallopian tubes or oviducts
  - Are hollow, muscular tubes about 13 cm (5.2 in.) in leighth
  - Transport oocyte from ovary to the uterus
- Histology of the Uterine Tube
  - –Epithelium lining uterine tube:
    - •Contains scattered mucin-secreting cells
  - –Mucosa is surrounded by concentric layers of smooth muscle

The Uterine Tubes

- Uterine Tube and Fertilization
  - For fertilization to occur:
    - Secondary oocyte must meet spermatozoa during first 12 to 24 hours
  - Fertilization typically occurs:
    - Near boundary between ampulla and isthmus

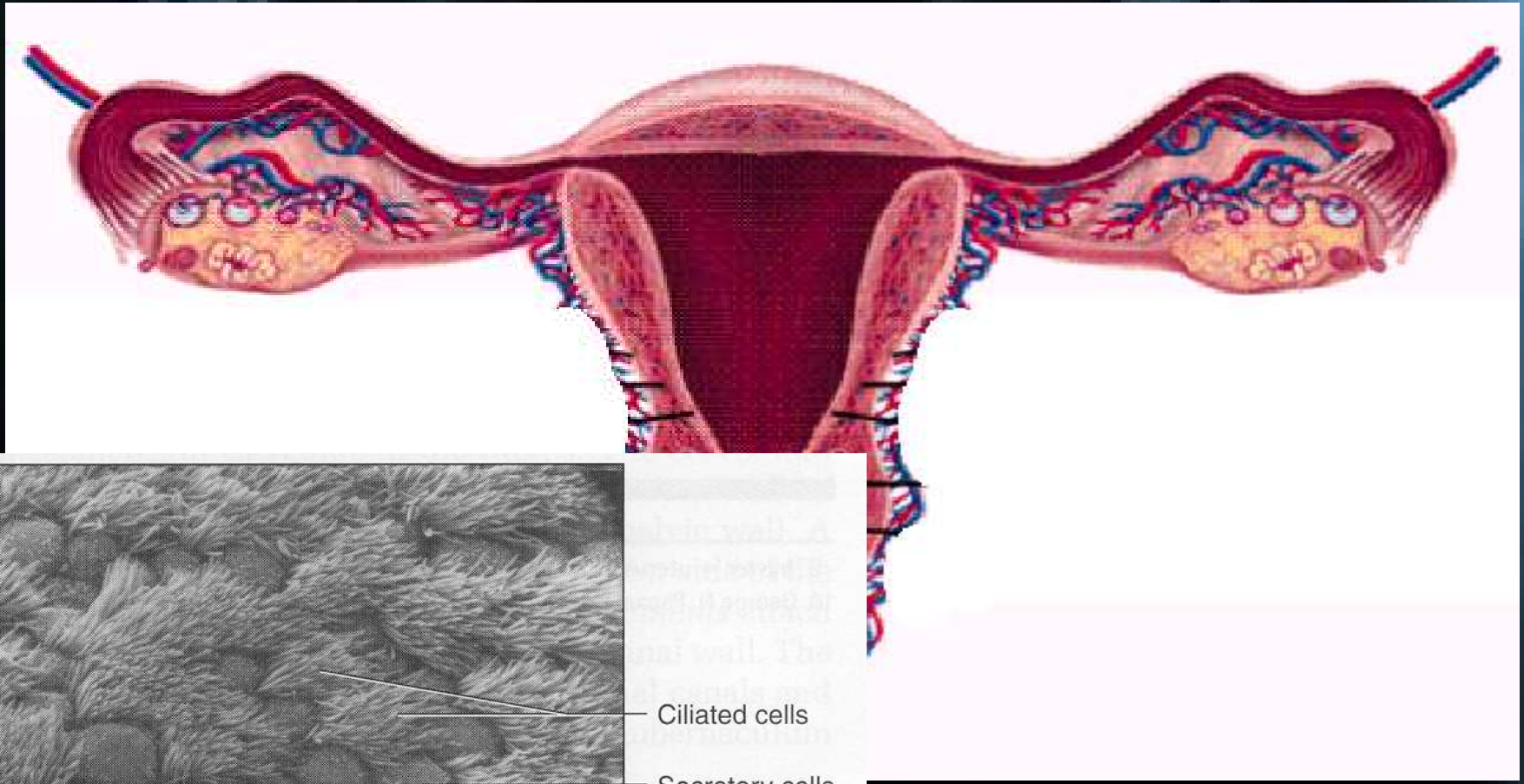


Fallopian Tubes

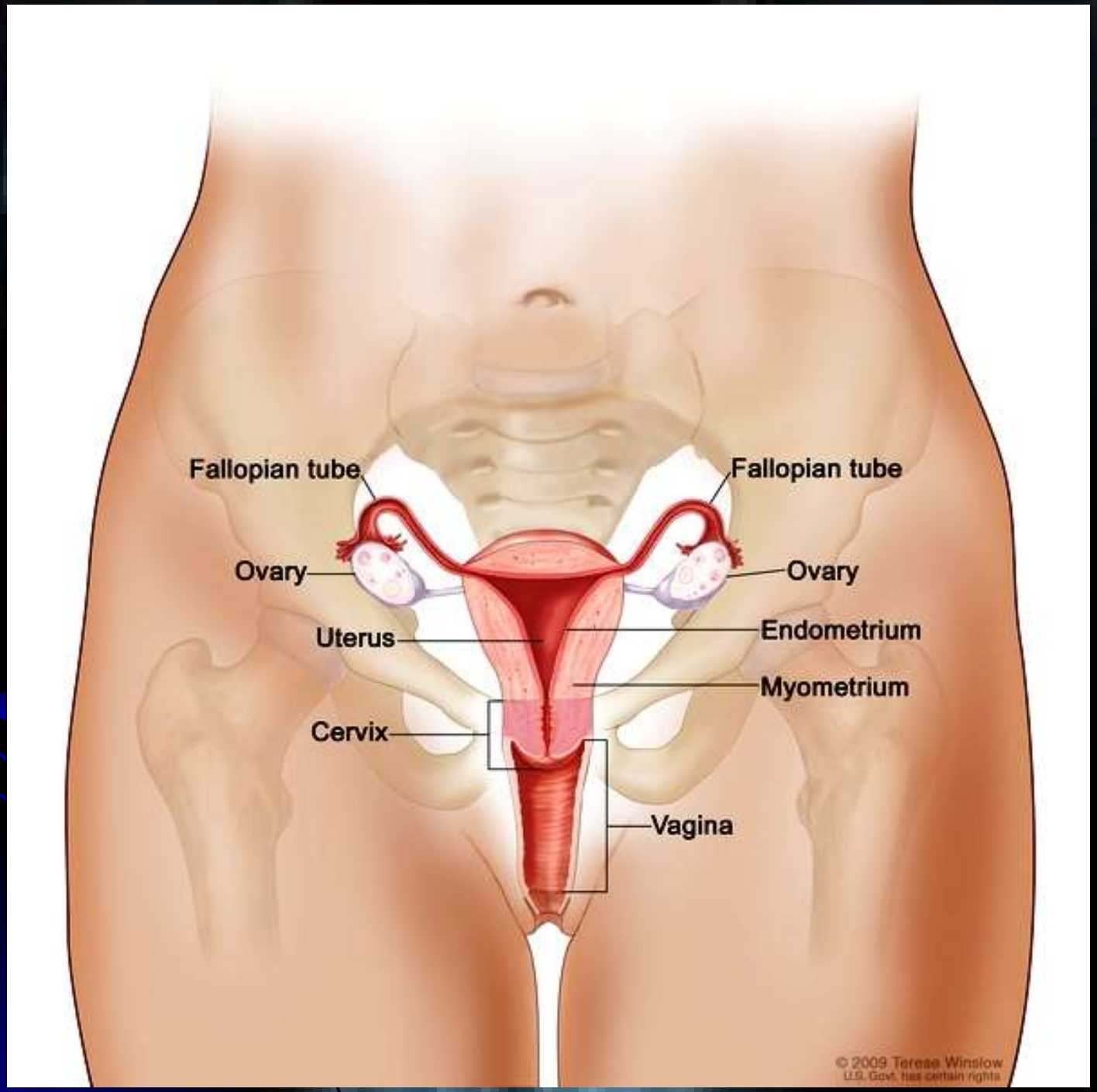


The Fallopian tubes, also known as oviducts, uterine tubes, and saplings, are two tubes leading from the ovaries of female into the uterus.

The Uterine Tubes (oviduct)



The cilia beat toward the uterus.


Fallopian tube
Fallopian tube
Ovary
Ovary
Uterus
Endometrium
Myometrium
Cervix
Vagina
© 2009 Terese Winslow
U.S. Govt. has certain rights

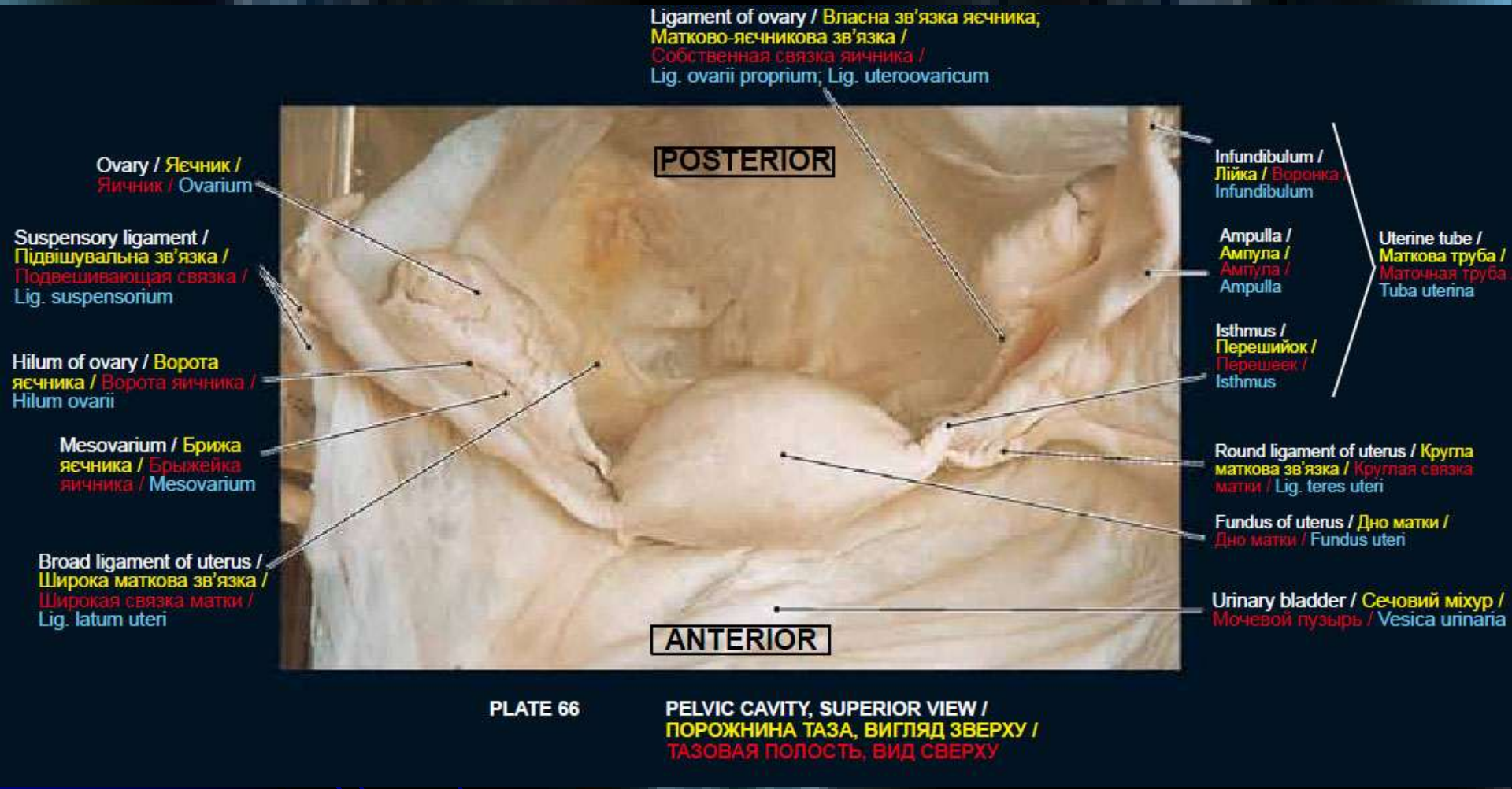
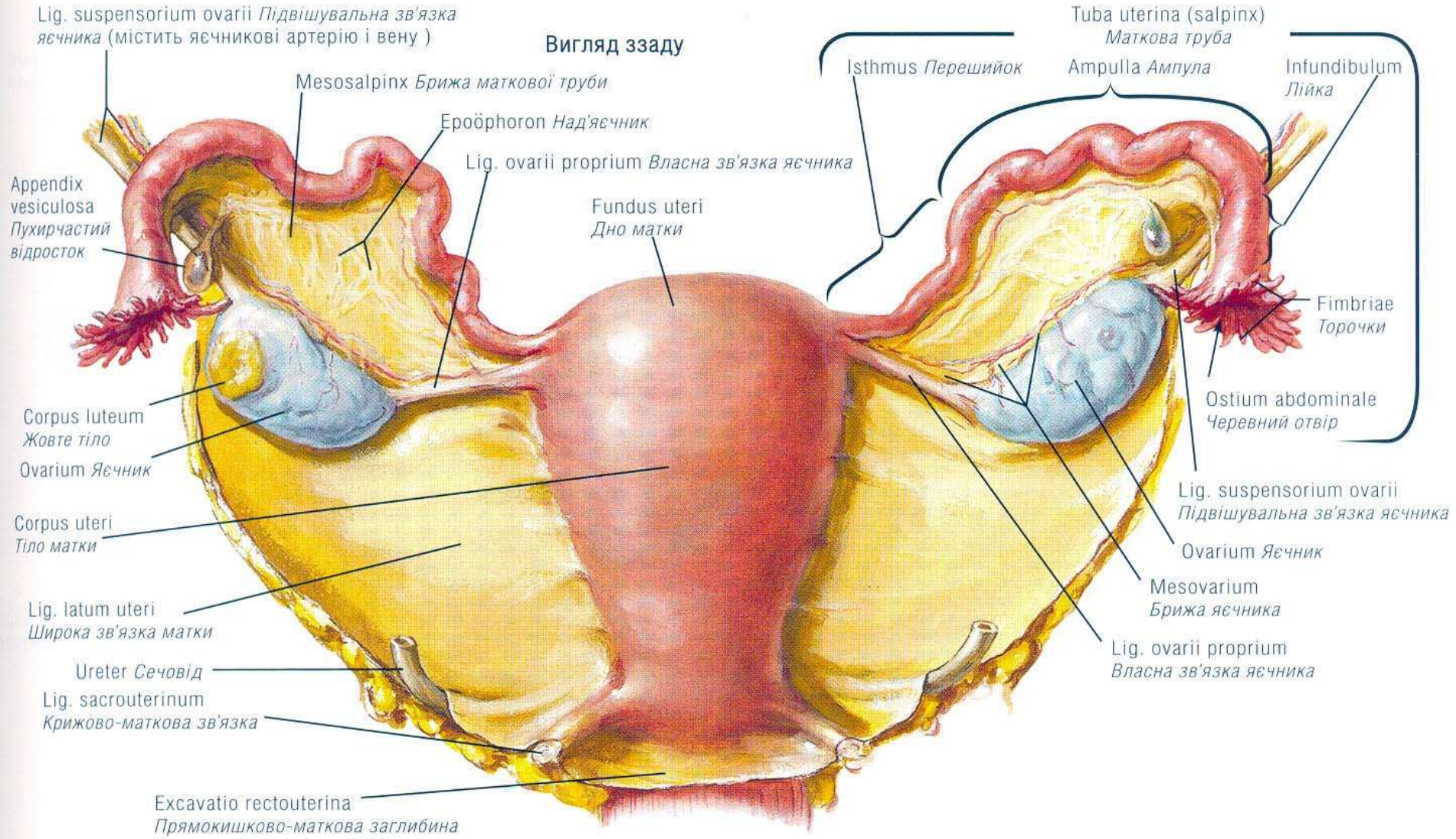
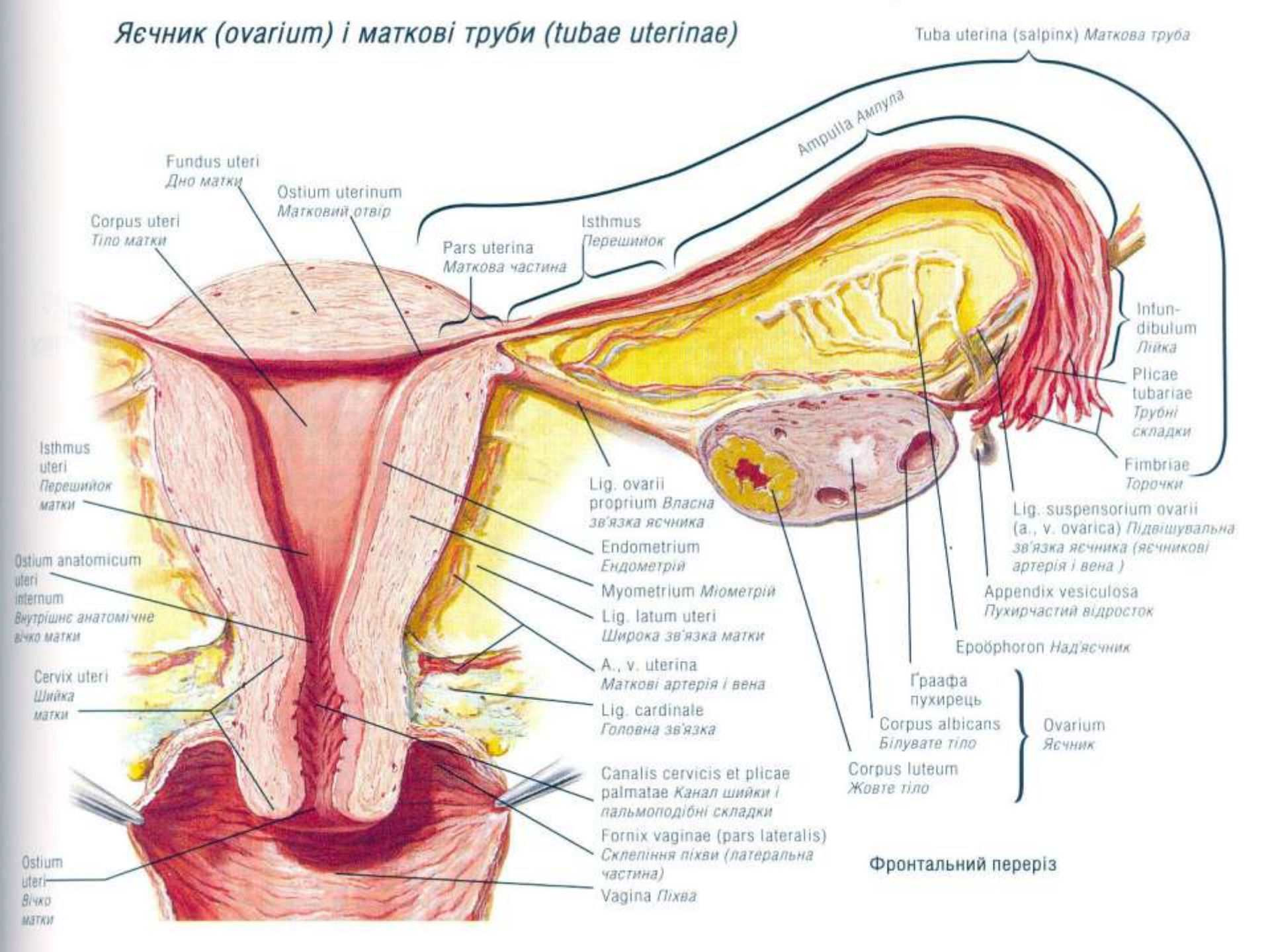


PLATE 66 **PELVIC CAVITY, SUPERIOR VIEW /**
ПОРОЖНИНА ТАЗА, ВИГЛЯД ЗВЕРХУ /
ТАЗОВАЯ ПОЛОСТЬ, ВИД СВЕРХУ

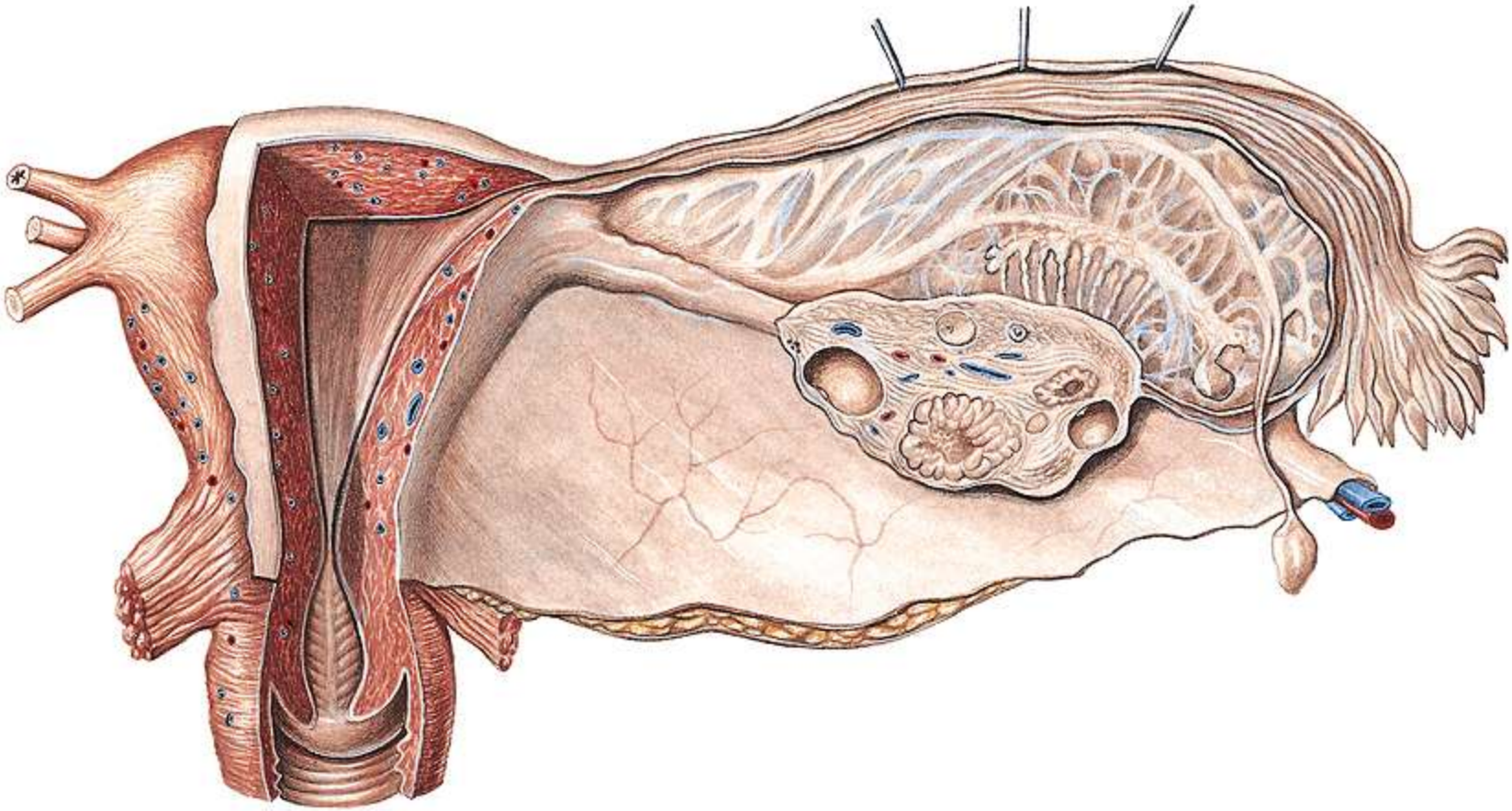
Яєчник (ovarium) і маткові труби (tubae uterinae)

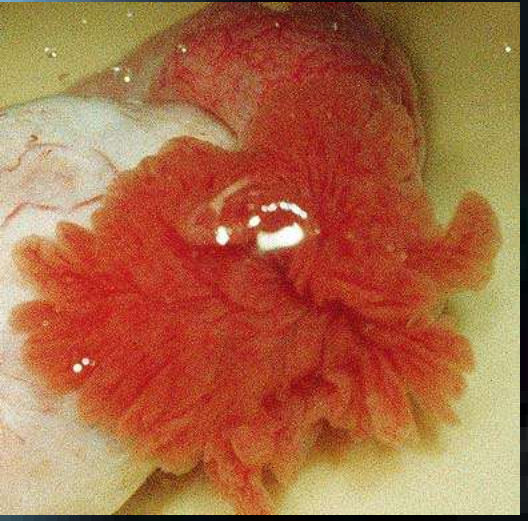


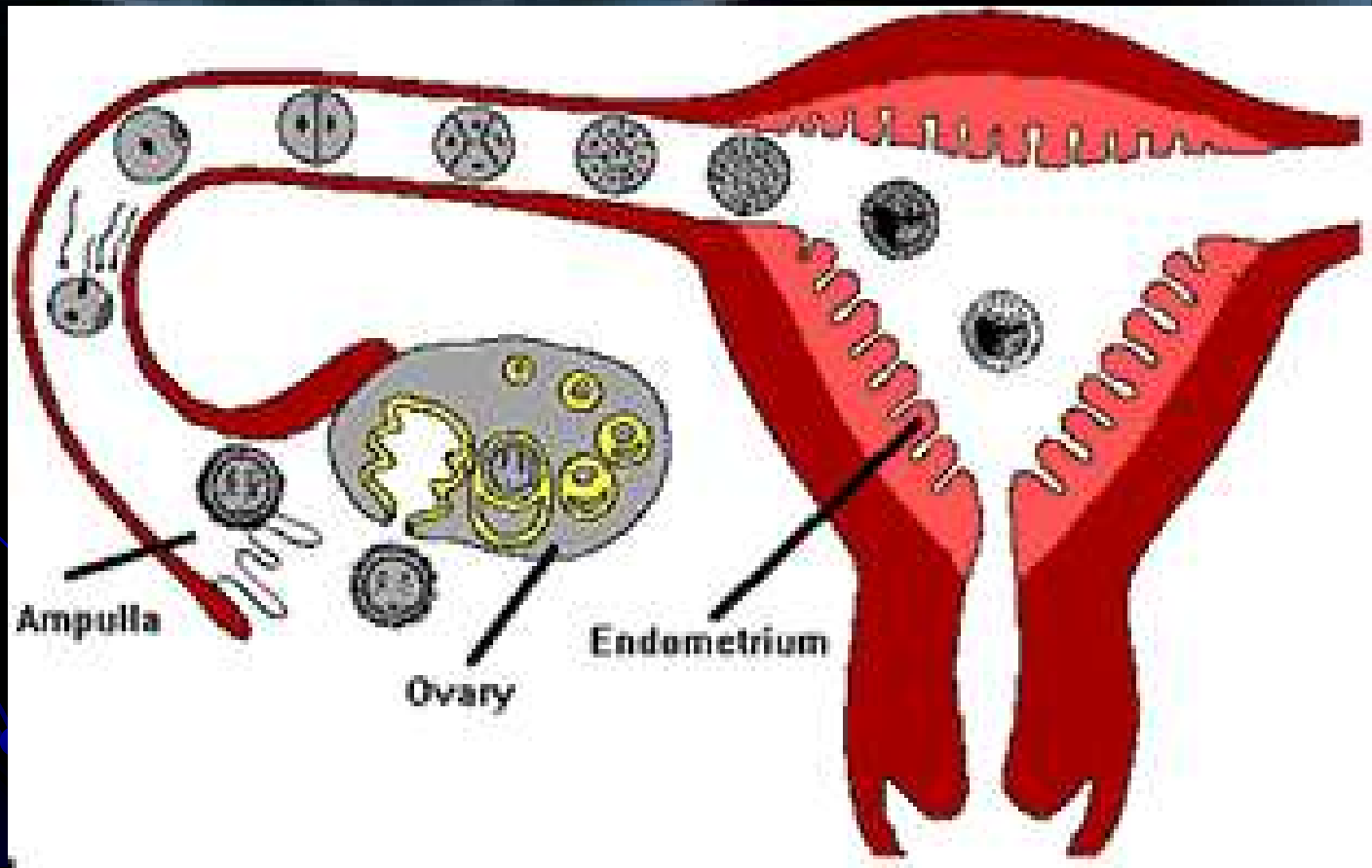
Яєчник (ovarium) і маткові труби (tubae uterinae)

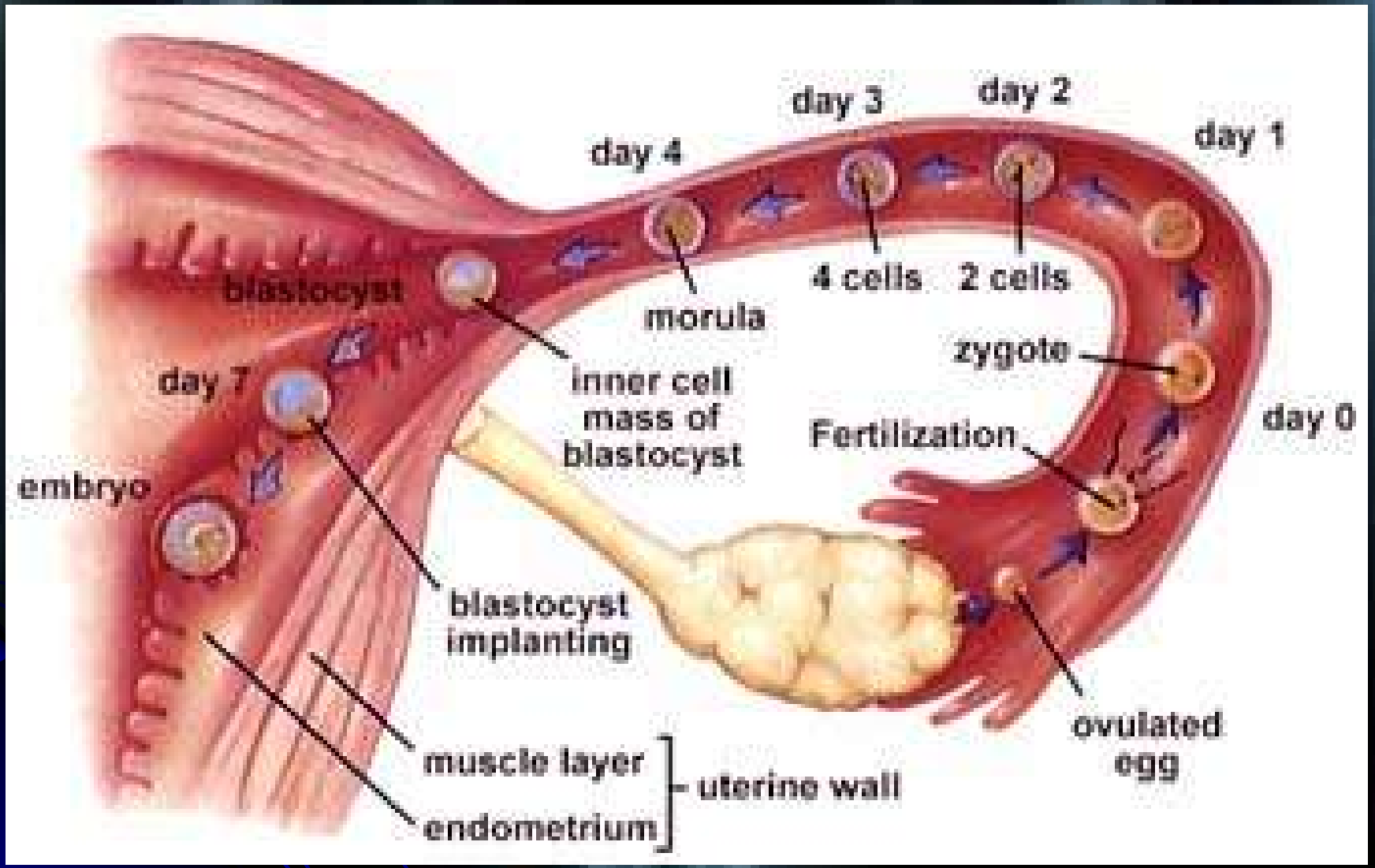


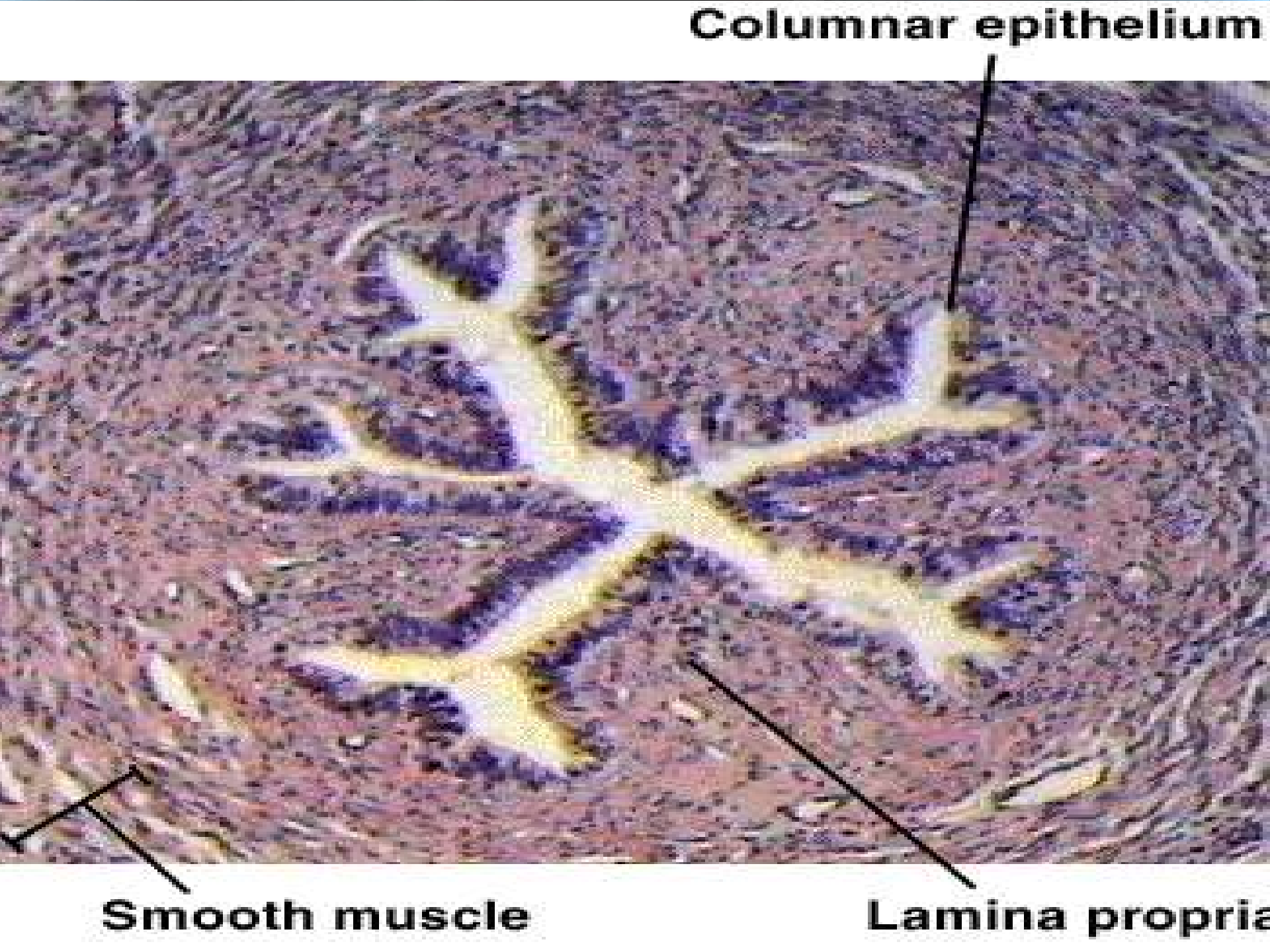
Фронтальний переріз





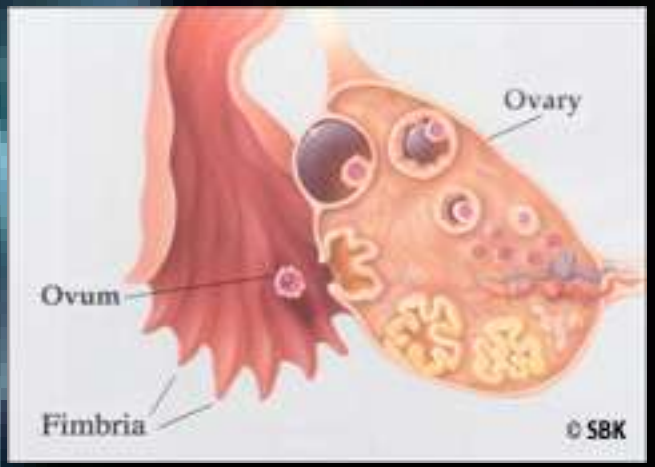

Ampulla
Ovary
Endometrium

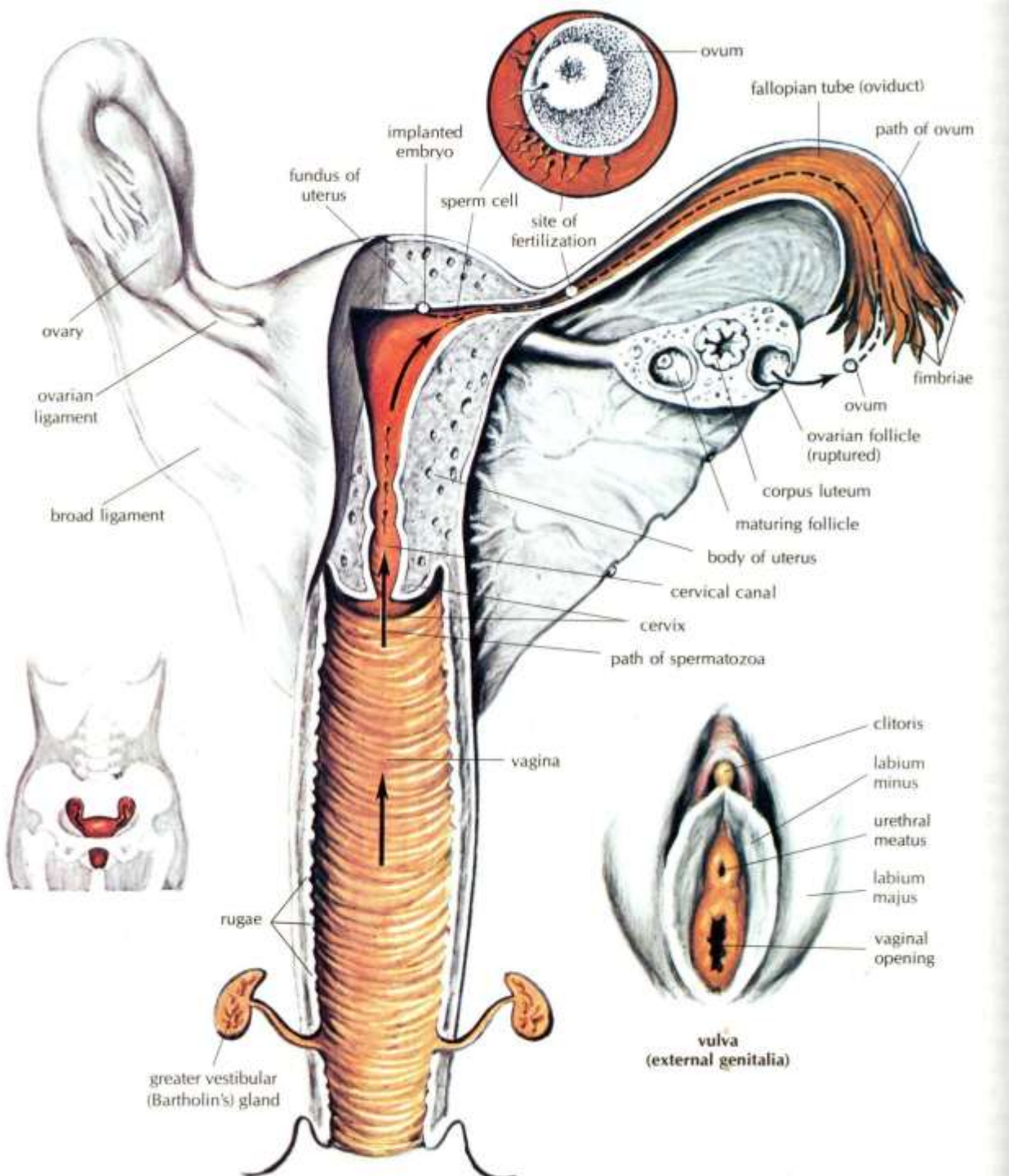

day 3
day 2
day 1
day 4
blastocyst
morula
4 cells
2 cells
zygote
day 7
inner cell
mass of
blastocyst
Fertilization
day 0
embryo
blastocyst
implanting
ovulated
egg
muscle layer
uterine wall
endometrium

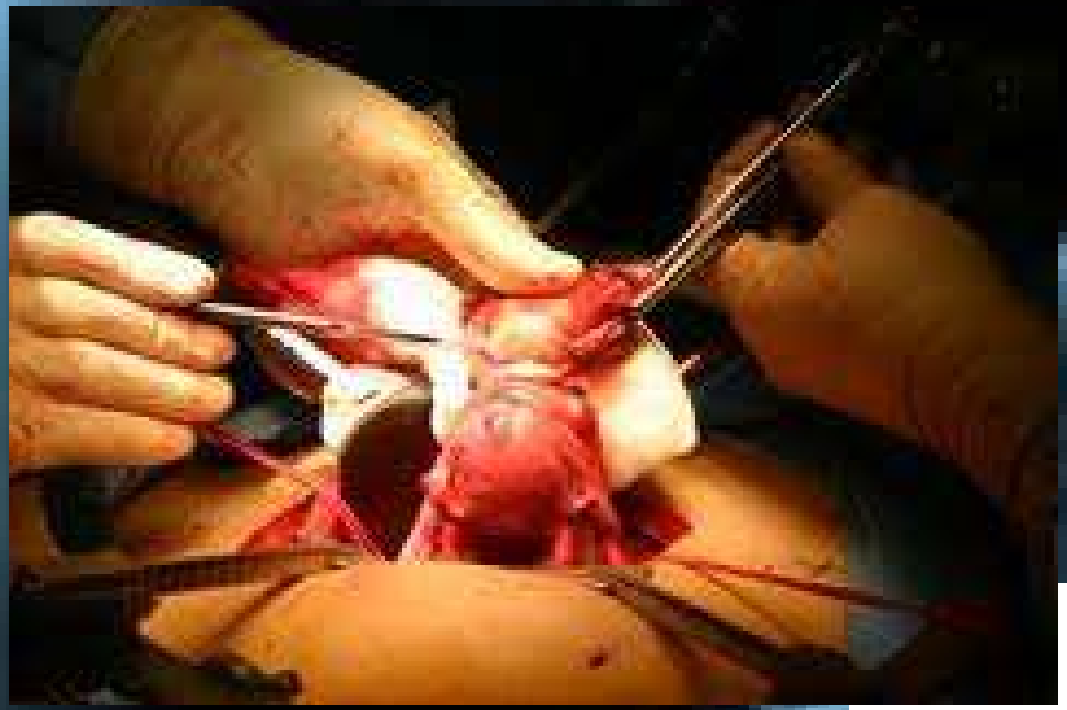

Columnar epithelium
Smooth muscle
Lamina propria

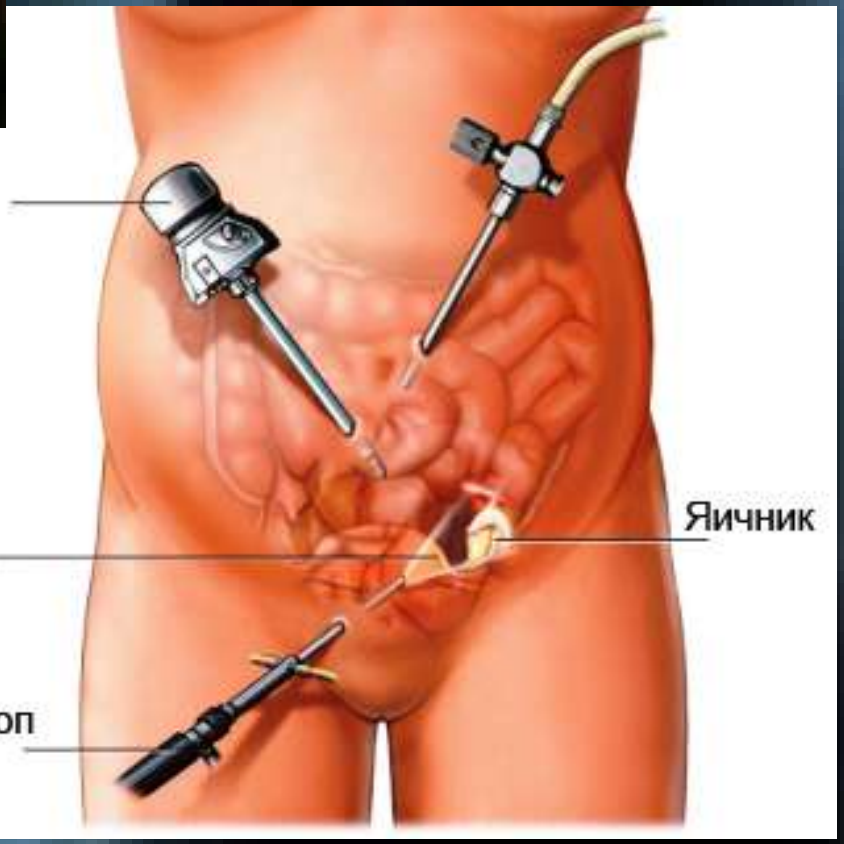
FIMBRIA

The fimbria is a fringe of tissue near the ovary leading to the Fallopian tubes. When ovulation is to occur, the sex hormones activate the fimbria, causing it to hit the ovary in a gentle, sweeping motion.

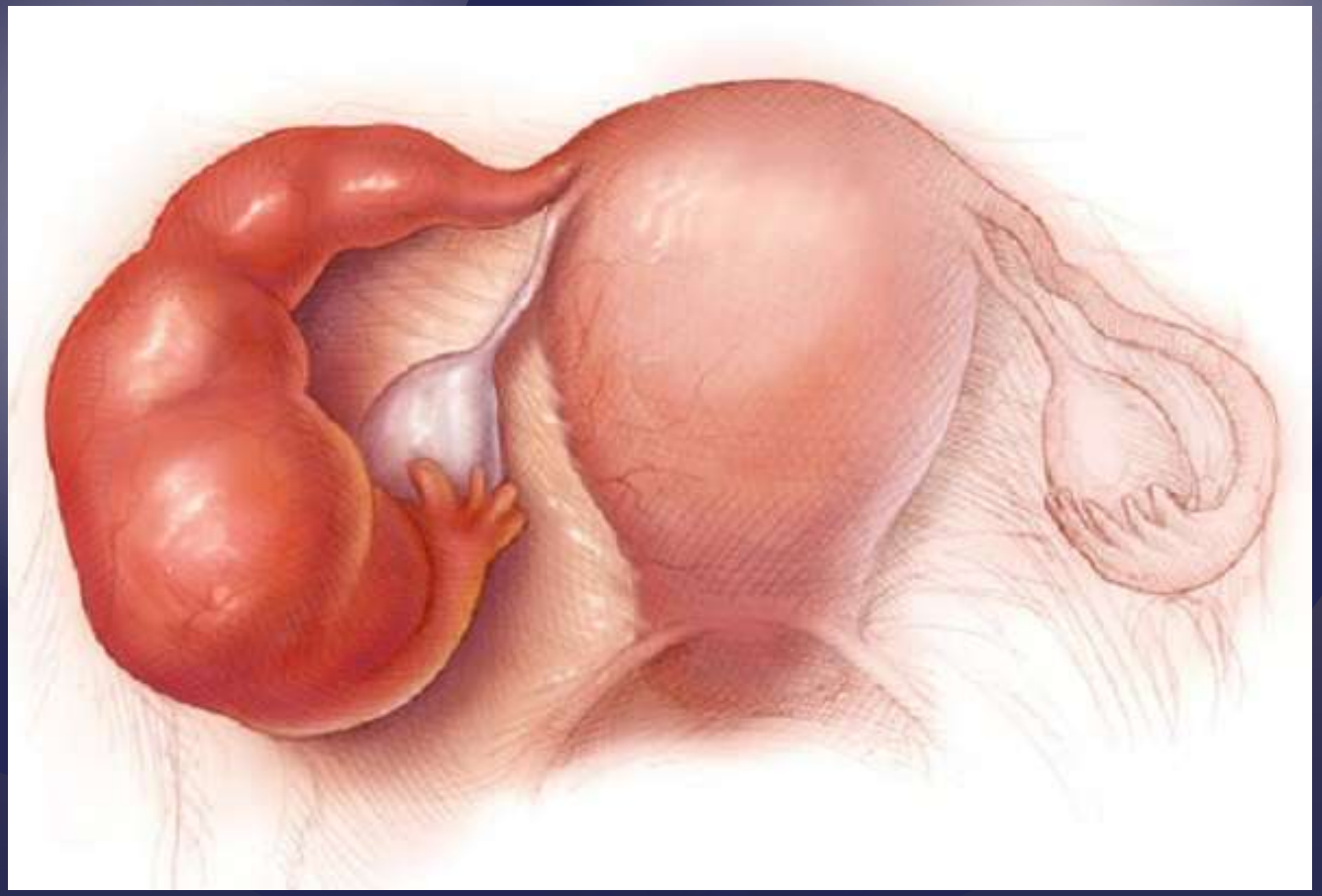


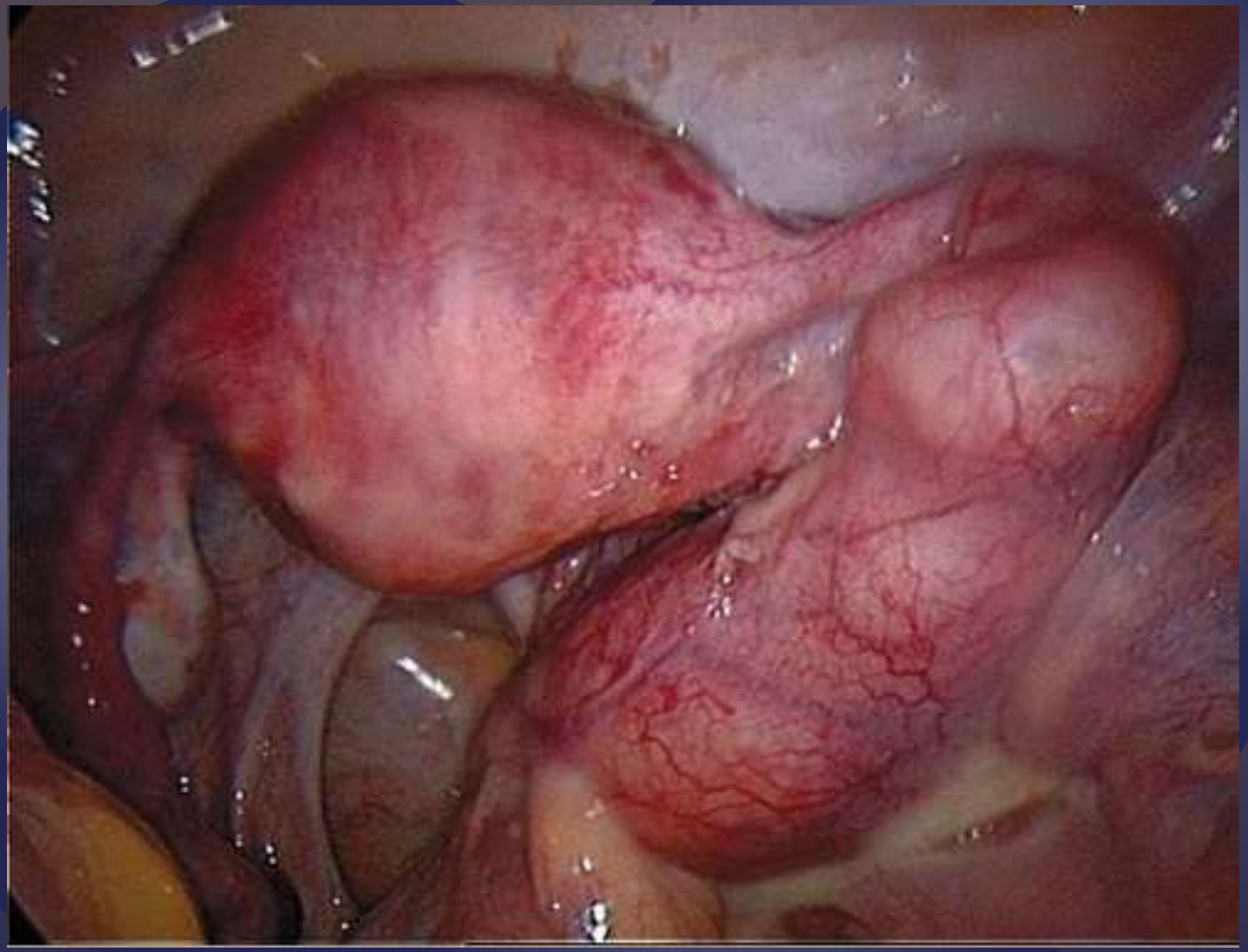

ovum
fallopian tube (oviduct)
path of ovum
implanted embryo
fundus of uterus
sperm cell
site of fertilization
ovary
ovarian ligament
broad ligament
fimbriae
ovum
ovarian follicle (ruptured)
corpus luteum
maturing follicle
body of uterus
cervical canal
cervix
path of spermatozoa
vagina
rugae
greater vestibular (Bartholin's) gland
clitoris
labium minus
urethral meatus
labium majus
vaginal opening
vulva
(external genitalia)




Троакар
Матка
Яичник
Лапароскоп

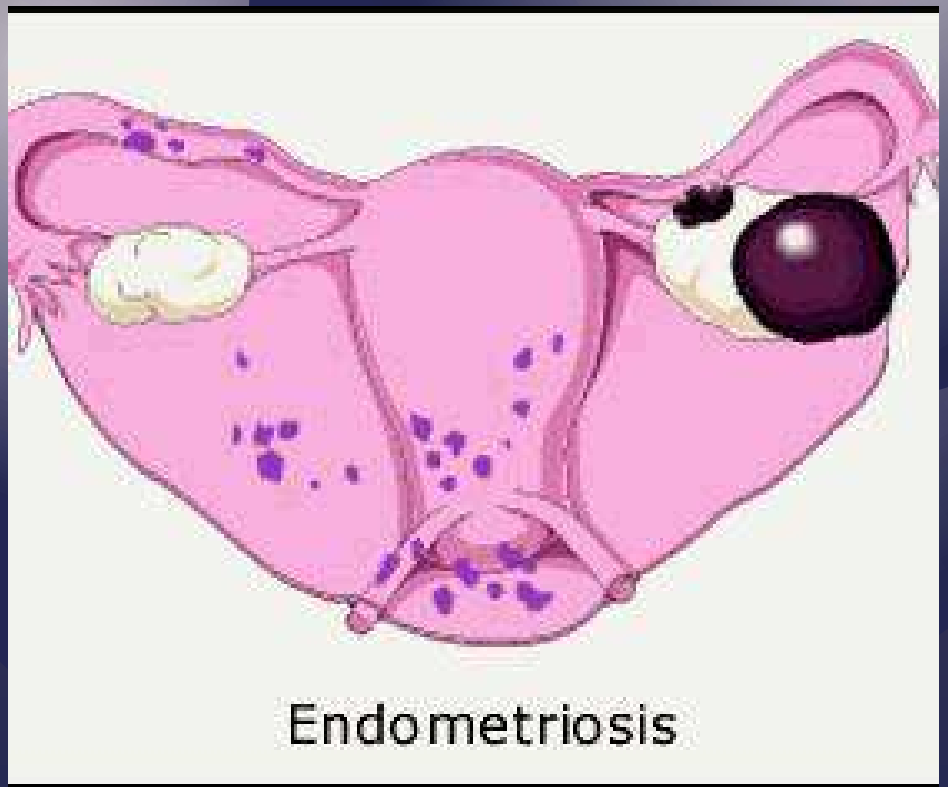
Salpingitis - inflammation of the fallopian tube.





Salpingo - inflammation of the fallopian tubes and ovaries

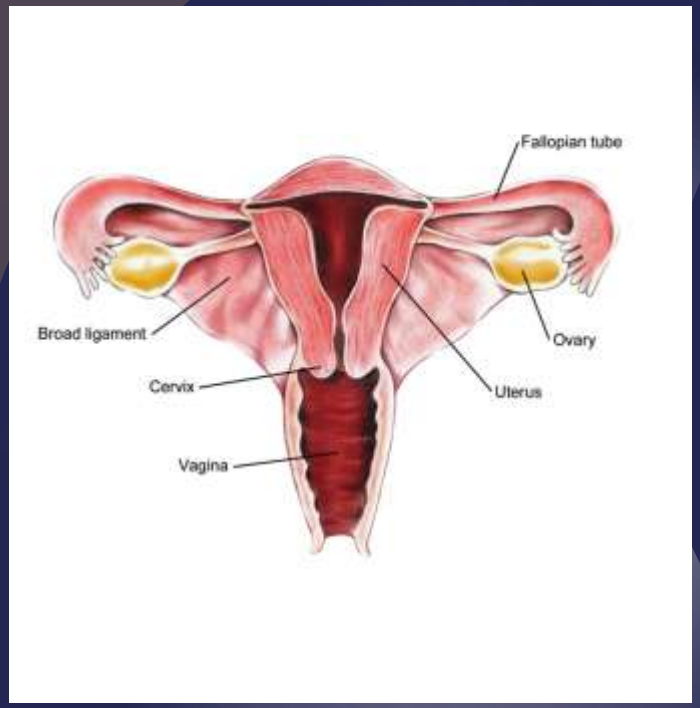
Endometriosis - gynecological disease in which cells of the endometrium (the inner layer of the uterine wall) grow out of this layer.

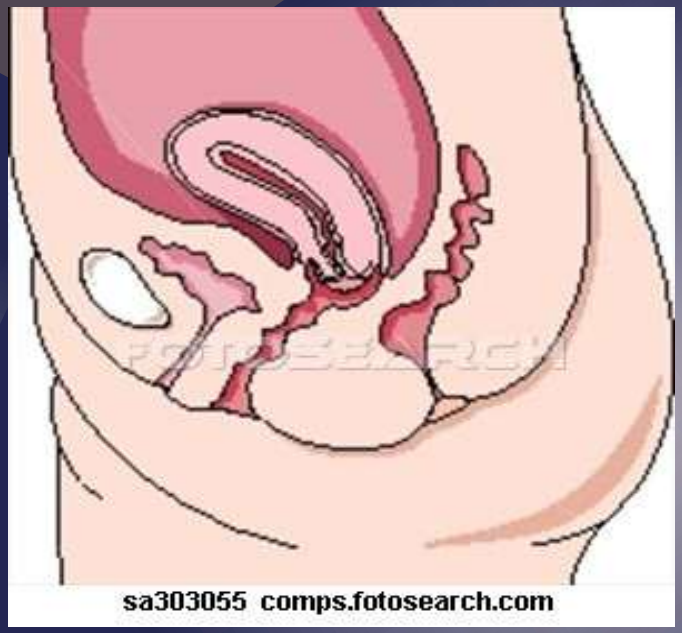


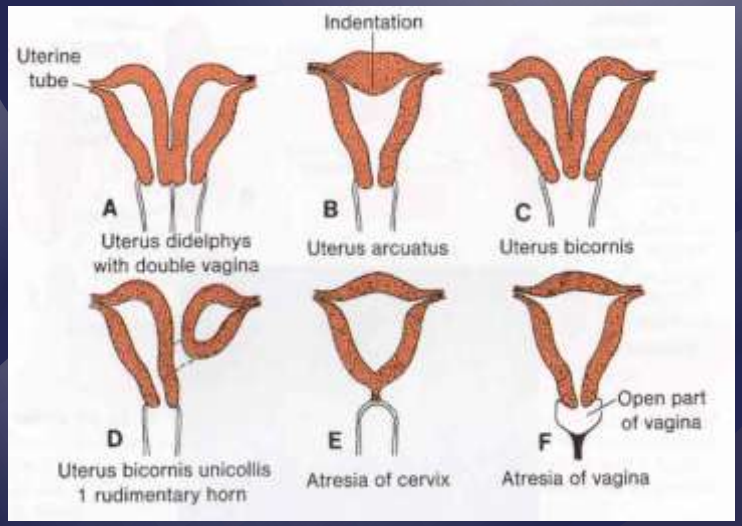
UTERUS

(UTERUS,
s. METRA,
s. HYSTERA,
s. DELFUS)

Uterus

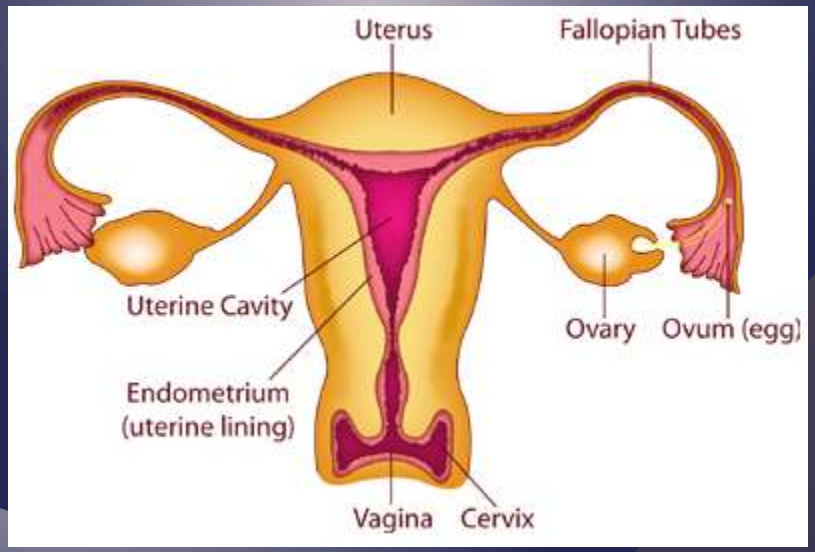

Fallopian tube
Broad ligament
Ovary
Cervix
Uterus
Vagina


sa303055 comps.fotosearch.com


Indentation
Uterine tube
A
Uterus didelphys with double vagina
B
Uterus arcuatus
C
Uterus bicornis
D
Uterus bicornis unicollis 1 rudimentary horn
E
Atresia of cervix
F
Open part of vagina
Atresia of vagina

Uterus

The main function of the uterus is to accept a fertilized ovum, which becomes implanted into the endometrium, and derives nourishment from blood vessels which develop exclusively for this purpose. The fertilized ovum becomes an embryo, develops into a fetus and gestates until childbirth. Due to anatomical barriers such as the pelvis, the uterus is pushed partially into the abdomen due to its expansion during pregnancy. Even in pregnancy the mass of a human uterus amounts to only about a kilogram .



Uterus

- Womb
- Located in the pelvis between the urinary bladder and the rectum
- Receives, retains and nourishes the fertilized egg
- The major portion is the body

Uterus

- Superior rounded region above the entrance of the uterine tubes is the fundus
- Narrow outlet that protrudes into the vagina below is the cervix

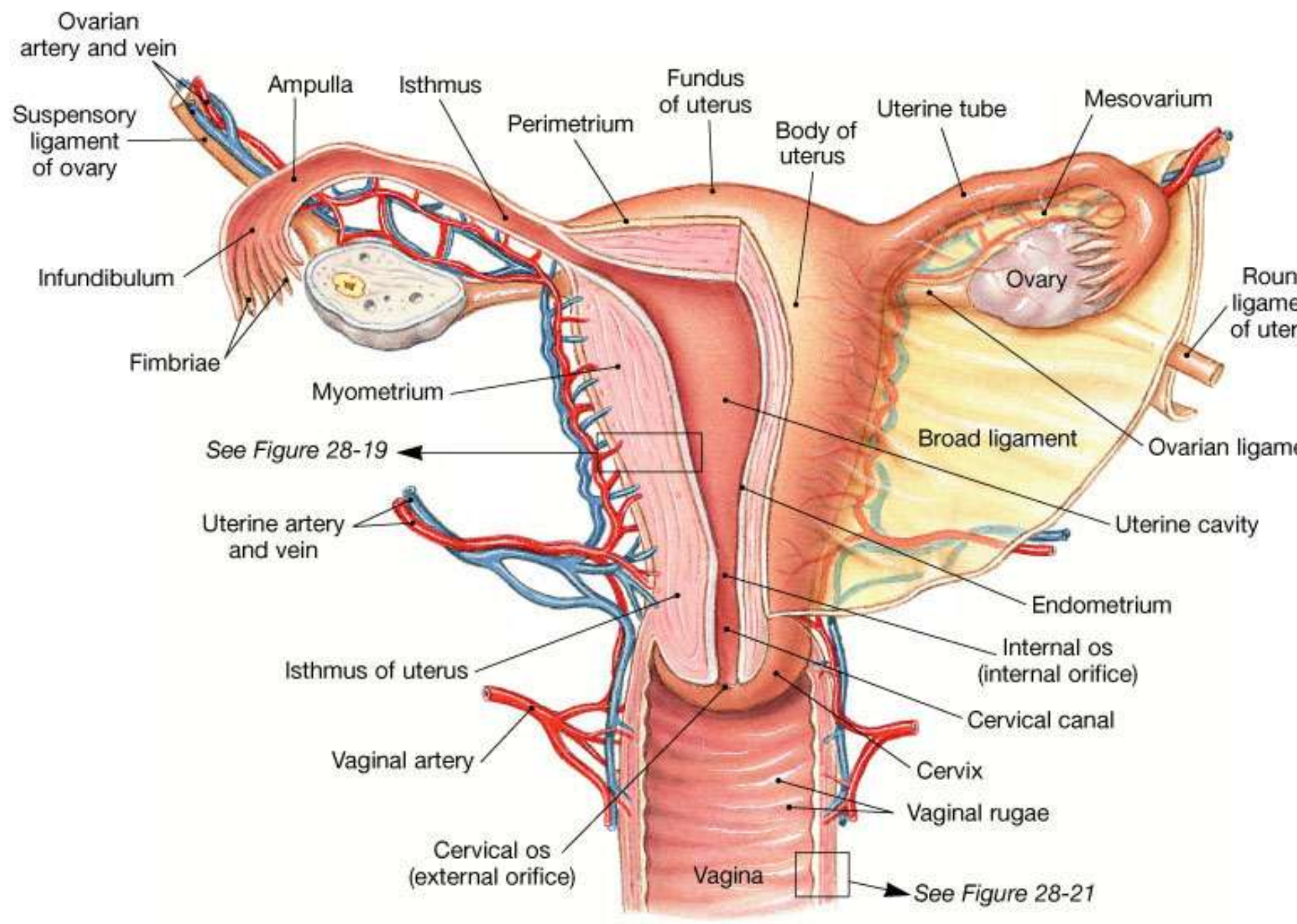
The Uterus

- Muscular organ
  - Mechanical protection
  - Nutritional support
  - Waste removal for the developing embryo and fetus
- Supported by the broad ligament and 3 pairs of suspensory ligaments

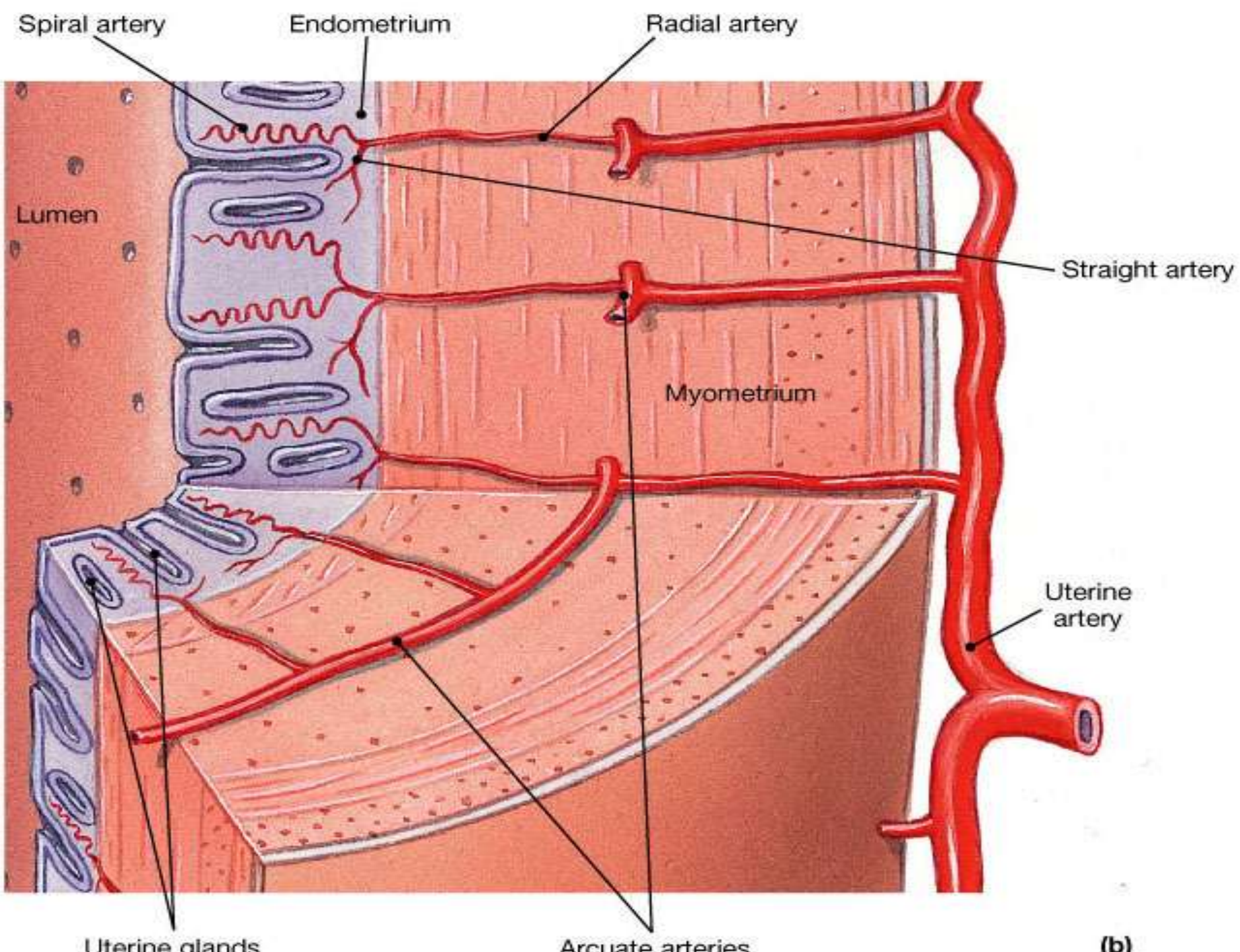
Uterine Wall Consists of 3 Layers:

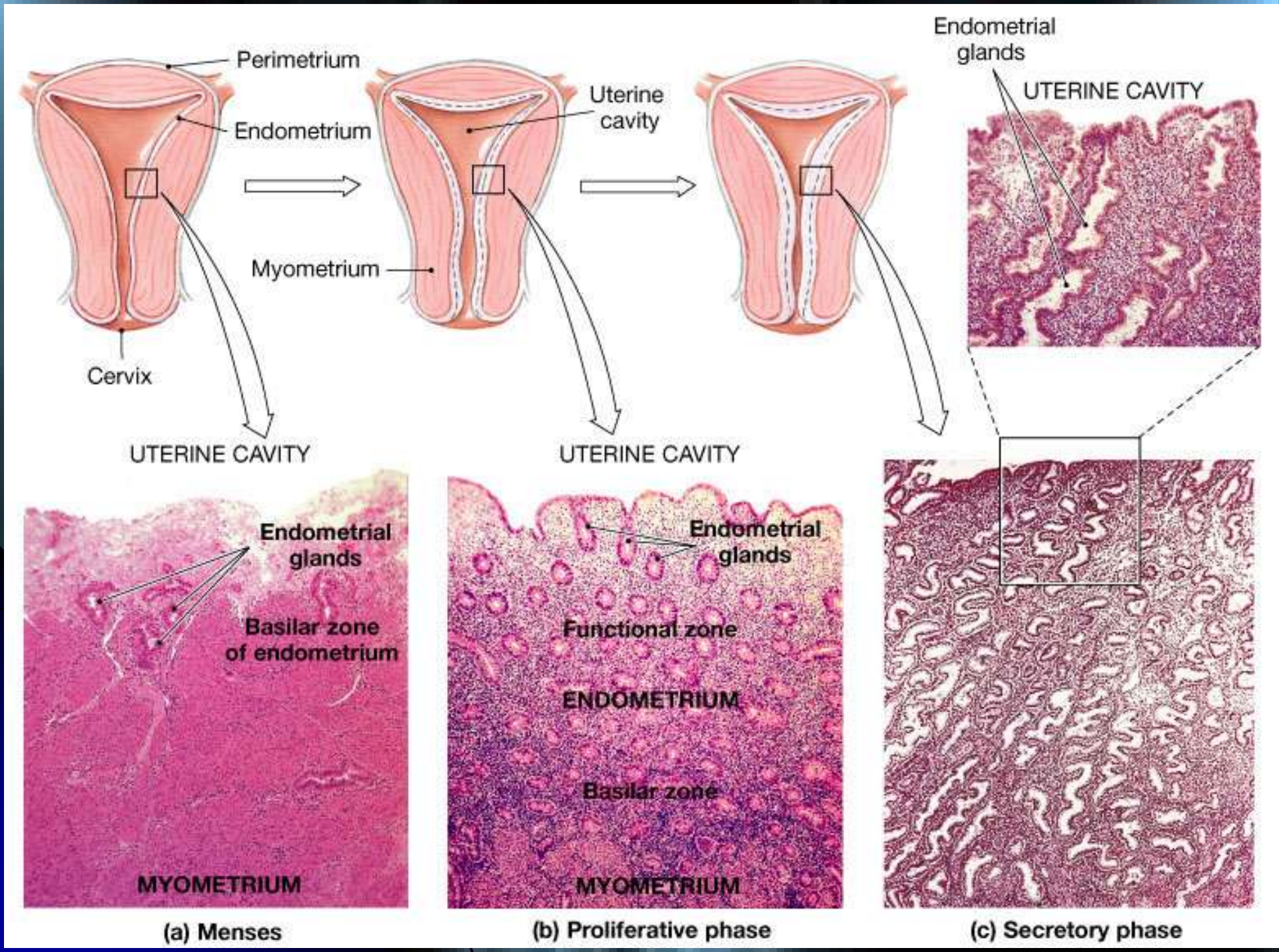
- Myometrium – outer muscular layer
- Endometrium – a thin, inner, glandular mucosa
- Perimetrium – an incomplete serosa continuous with the peritoneum
- The site of implantation of developing embryo
- And 3 parts: fundus, body, and cervix

Anatomically, the uterus occupies a central position in the reproductive system WOMEN BUT ITS DEVELOPMENT AND FUNCTIONAL STATUS depends on hormonal ovarian function. DECISION PROVIDES uterus fertilized eggs, embryos POWER PROTECTION AND THAT DEVELOPED AND OUTPUT OF THE BODY ripe fruit. The first two functions associated with mucous membranes, and the last - with muscle of the uterus.

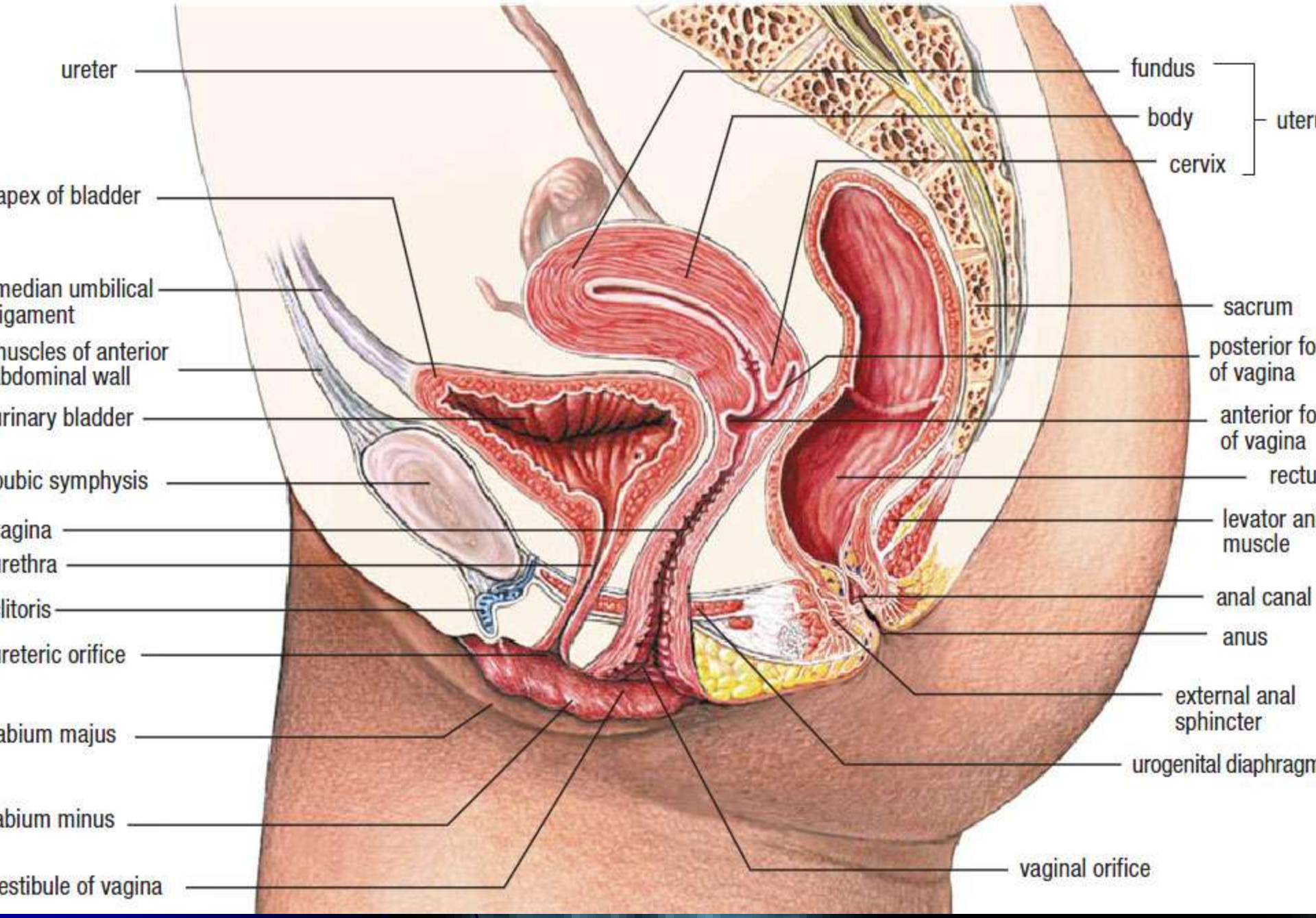


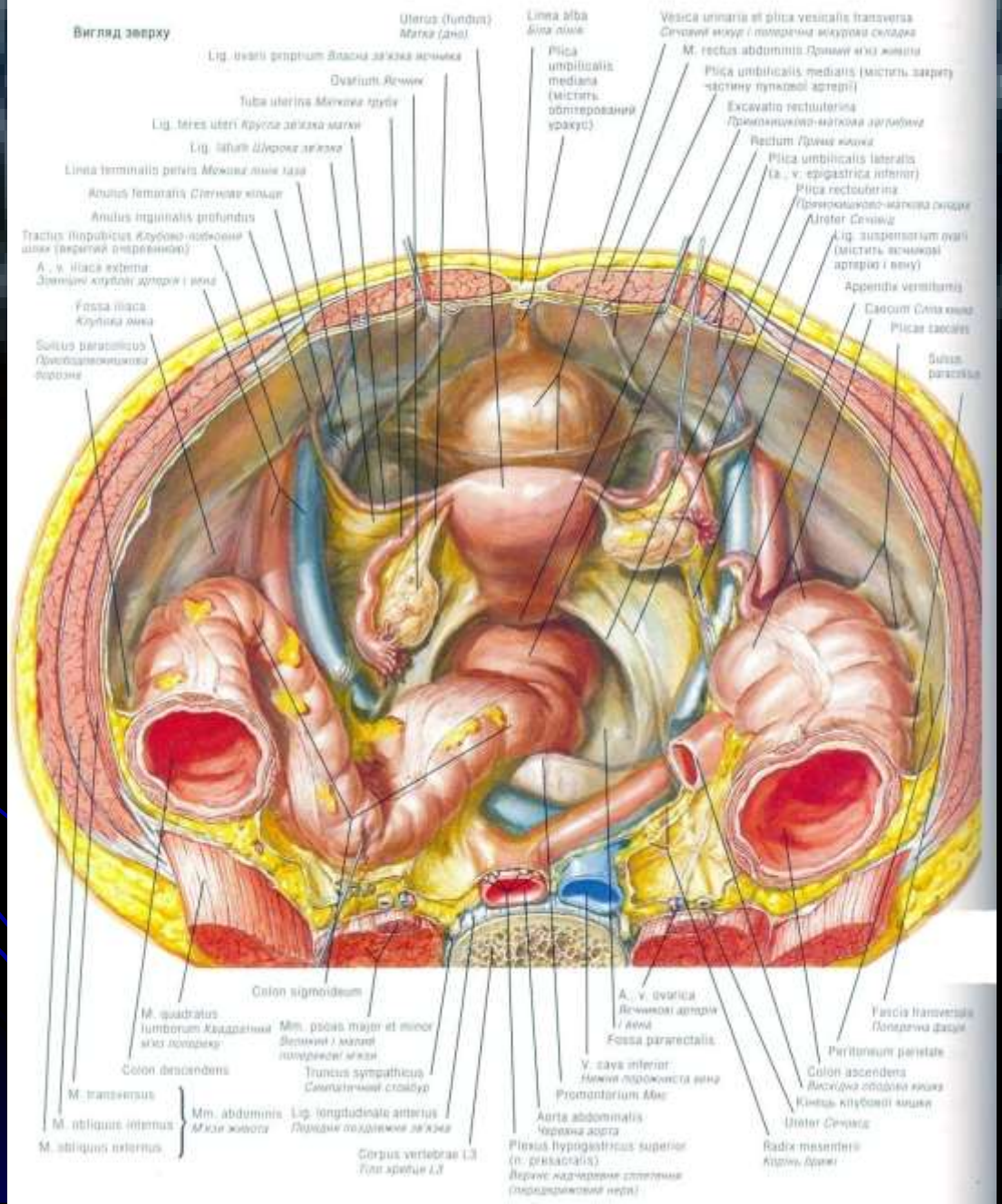
(c) Posterior view


Spiral artery
Endometrium
Radial artery
Lumen
Straight artery
Myometrium
Uterine artery
Uterine glands
Arcuate arteries
(b)

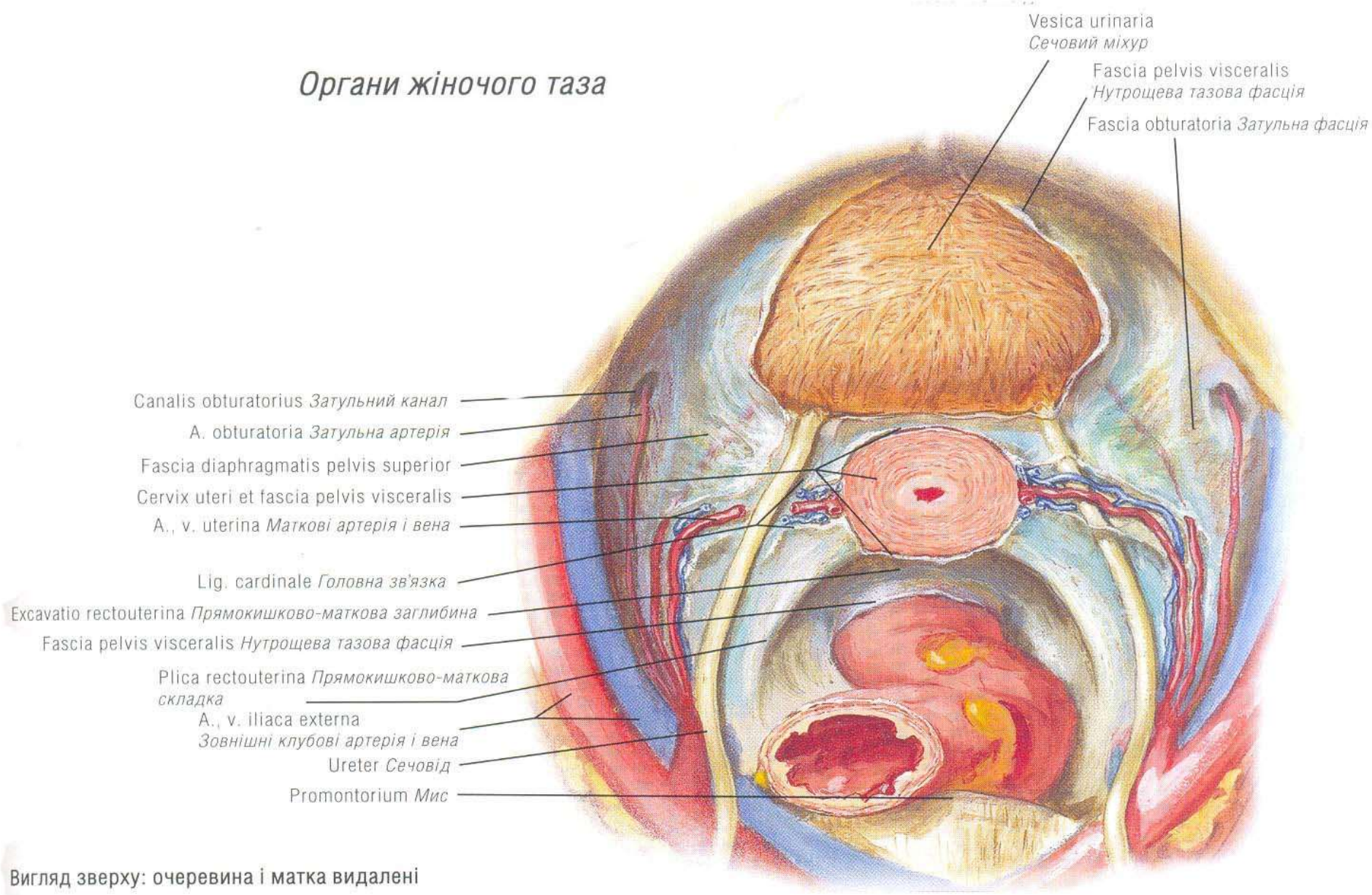

Perimetrium
Endometrium
Myometrium
Cervix
UTERINE CAVITY
Uterine cavity
UTERINE CAVITY
Endometrial glands
UTERINE CAVITY
Endometrial glands
Basilar zone of endometrium
MYOMETRIUM
(a) Menses
Endometrial glands
Functional zone
ENDOMETRIUM
Basilar zone
MYOMETRIUM
(b) Proliferative phase
(c) Secretory phase

Топографія відношення



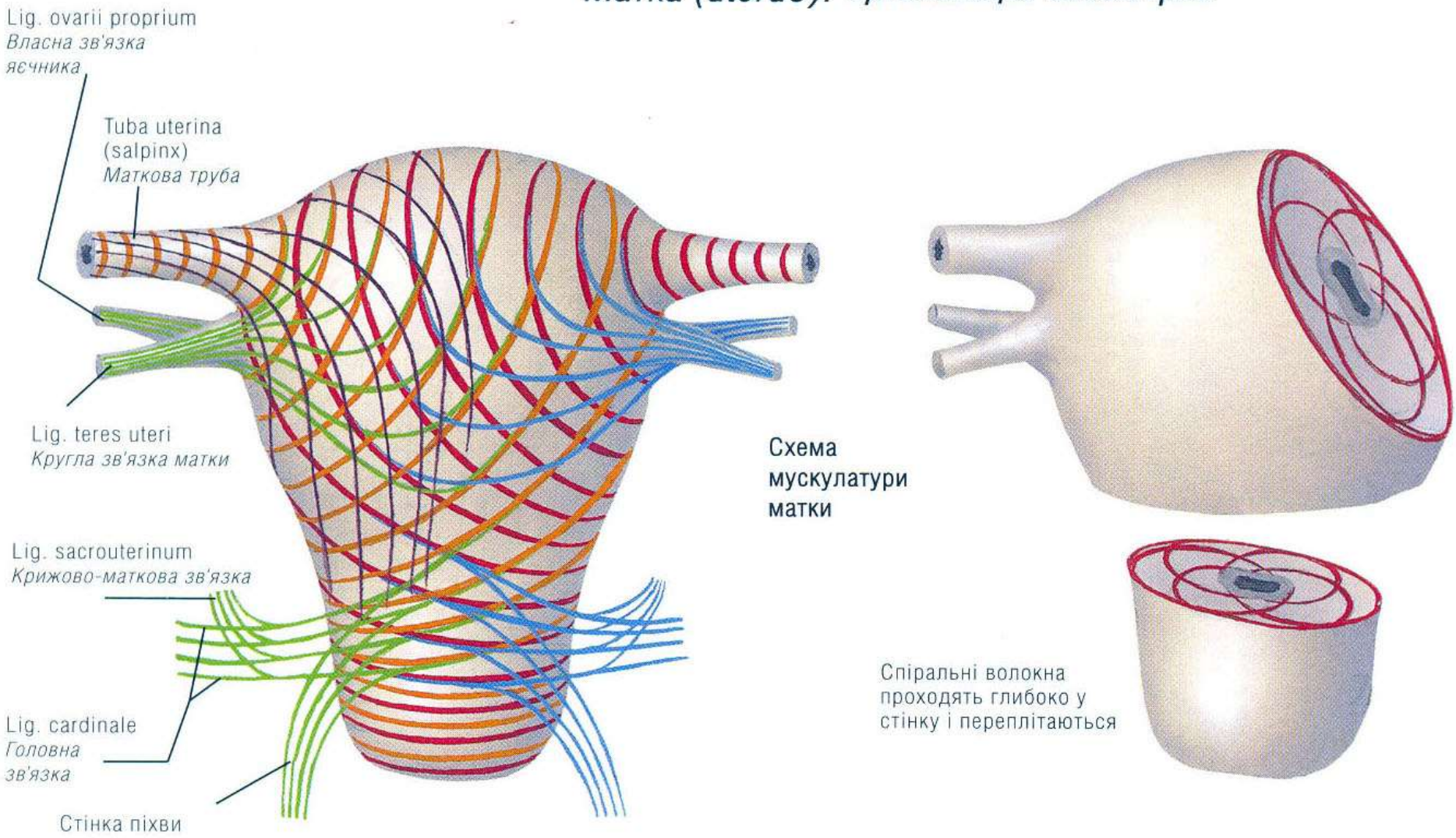

Вигляд зверху
Uterus (fundus)
Матка (дно)
Linea alba
Біла лінія
Vesica urinaria et plica vesicalis transversa
Сечовий міхур і поперечна міхурова складка
M. rectus abdominis Прямий м'яз живота
Plica umbilicalis mediana (містить облітерований уракус)
Plica umbilicalis medialis (містить закриту частину пупкової артерії)
Excavatio rectouterina Прямокишково-маткова заглибина
Rectum Пряма кишка
Plica umbilicalis lateralis (a., v. epigastrica inferior)
Plica rectouterina Прямокишково-маткова складка
Ureter Сечовід
Lig. suspensorium ovarii (містить яєчникові артерію і вену)
Appendix vermiformis
Caecum Сліпа кишка
Plicae caecales
Sulcus paracolicus
Lig. ovarii proprium Власна зв'язка яєчника
Ovarium Яєчник
Tuba uterina Маткова труба
Lig. teres uteri Кругла зв'язка матки
Lig. latum Широка зв'язка
Linea terminalis pelvis Межова лінія таза
Anulus femoralis Стегнове кільце
Anulus inguinalis profundus
Tractus iliopubicus Клубово-лобкова шлея (вкритий очеревиною)
A., v. iliaca externa Зовнішні клубові артерія і вена
Fossa iliaca Клубова ямка
Sulcus paracolicus Прикободовищикова борозна
Colon sigmoideum
M. quadratus lumborum Квадратний м'яз поперику
Mm. psoas major et minor Великий і малий поперекові м'язи
A., v. ovarica Яєчникові артерія і вена
Fossa pararectalis
V. cava inferior Нижня порожниста вена
Promontorium Мис
Aorta abdominalis Черевна аорта
Plexus hypogastricus superior (n. presacralis) Верхнє надчеревне сплетення (прекрижовий нерв)
Corpus vertebrae L3 Тіло хребця L3
Radix mesenterii Корінь брижі
Ureter Сечовід
Colon ascendens Висхідна ободова кишка
Кінець клубової кишки
Peritoneum parietale
Fascia transversalis Поперечна фасція
Colon descendens
Truncus sympathicus Симпатичний стовбур
Lig. longitudinale anterius Передня поздовжня зв'язка
M. transversus
M. obliquus internus
M. obliquus externus
Mm. abdominis М'язи живота

Органи жіночого таза

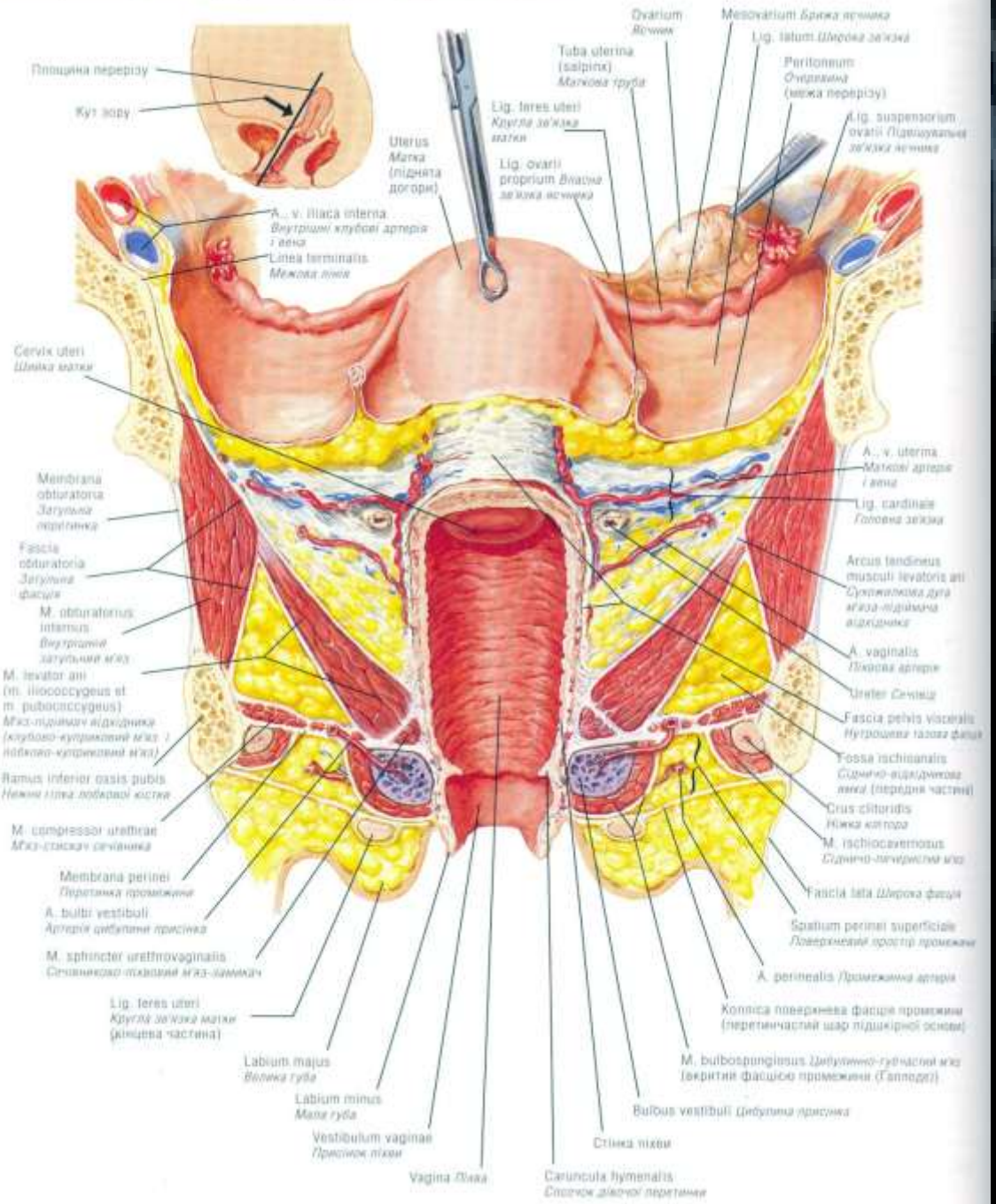


Вигляд зверху: очеревина і матка видалені

Матка (uterus): організація міометрію

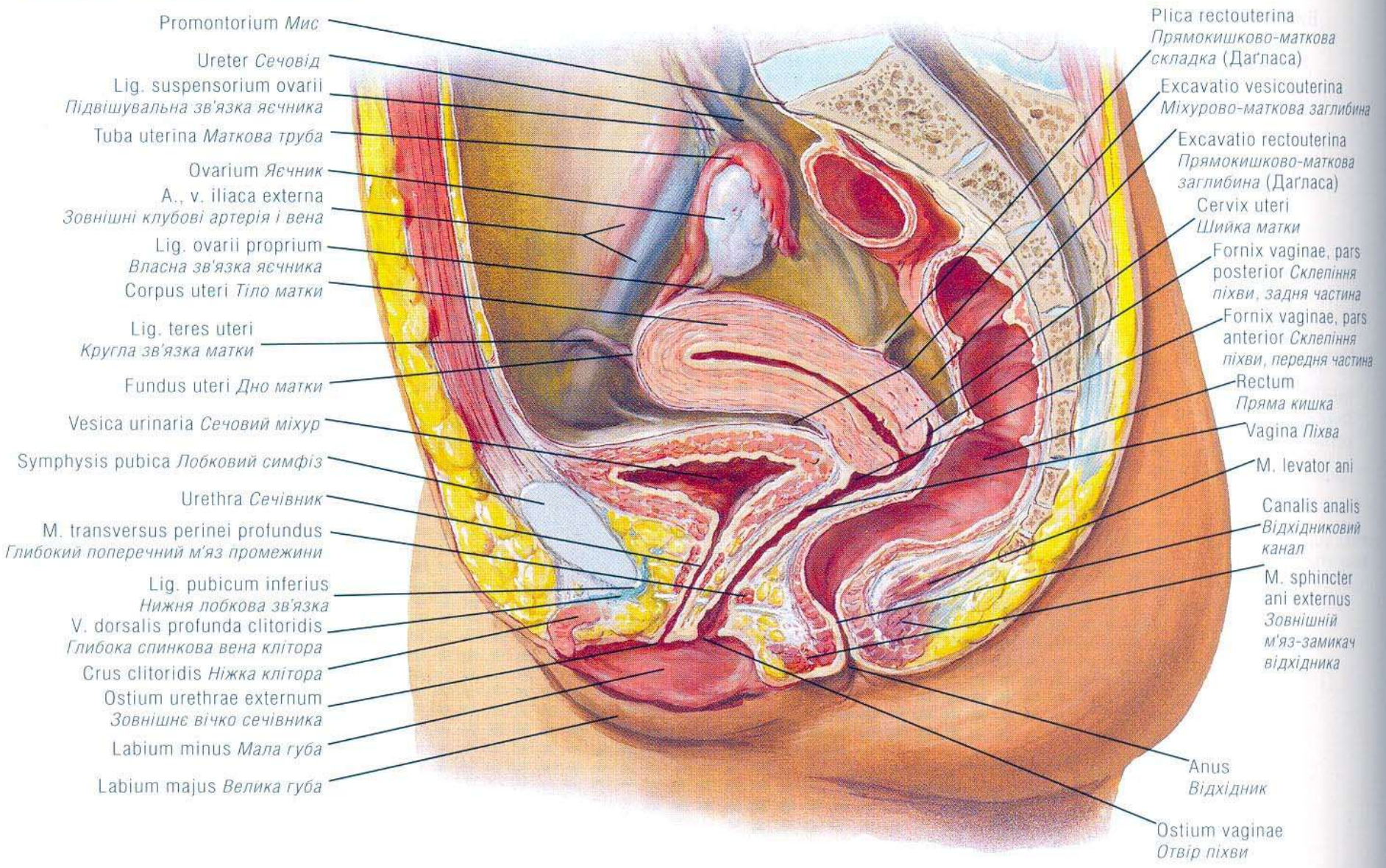


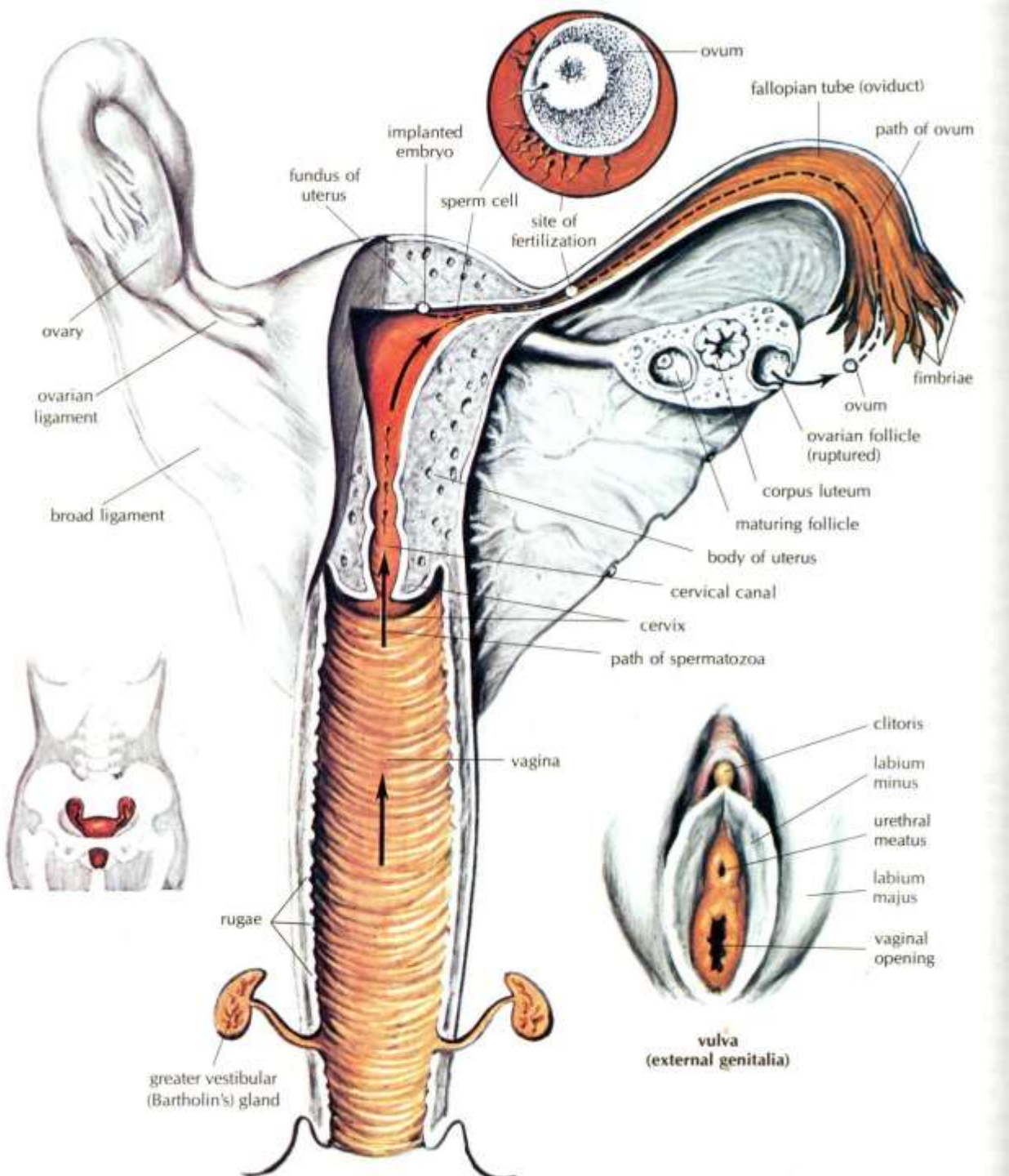
Матка (uterus), піхва (vagina) й органи, що їх оточують

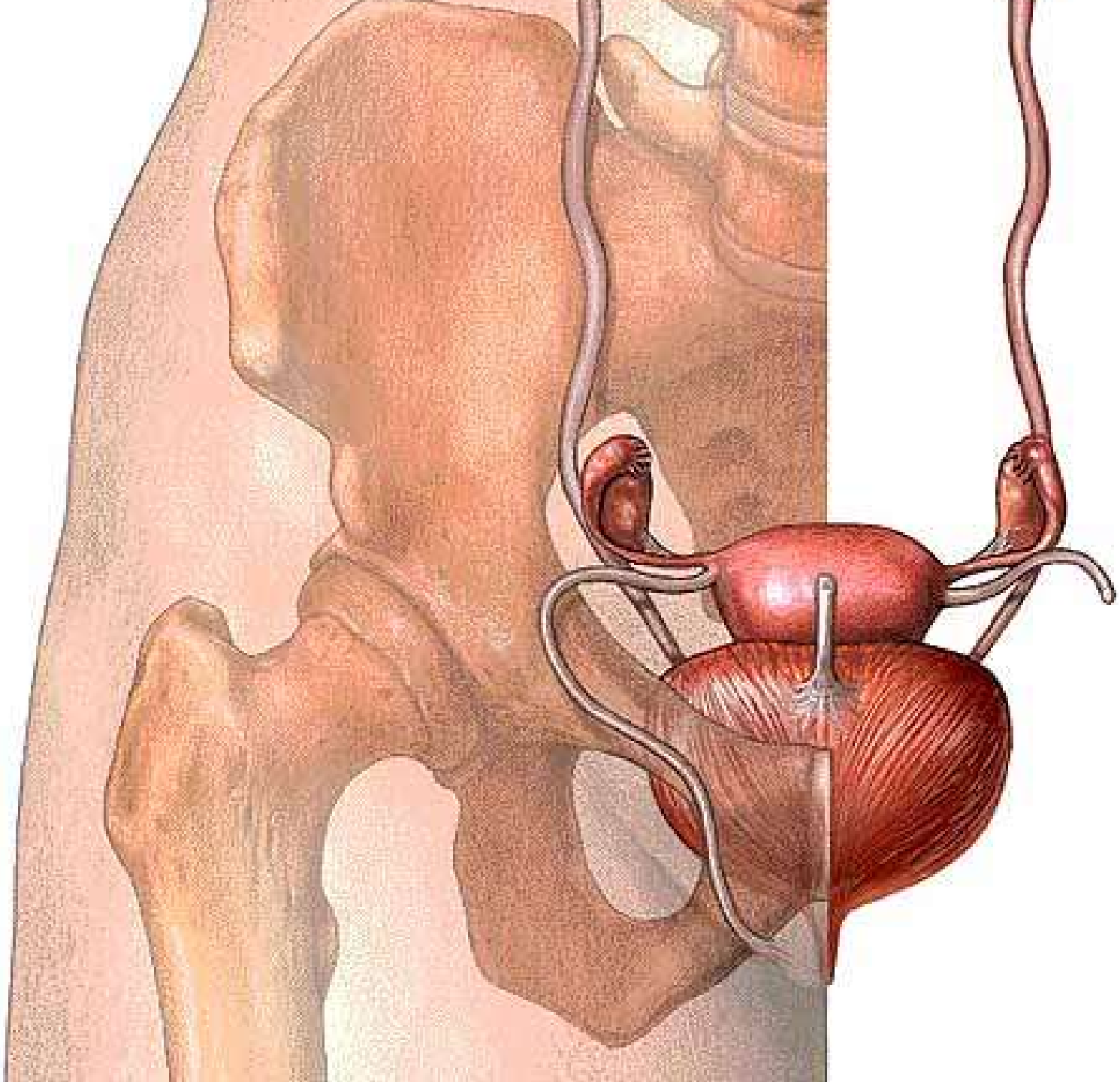


Органи жіночого таза і промежина

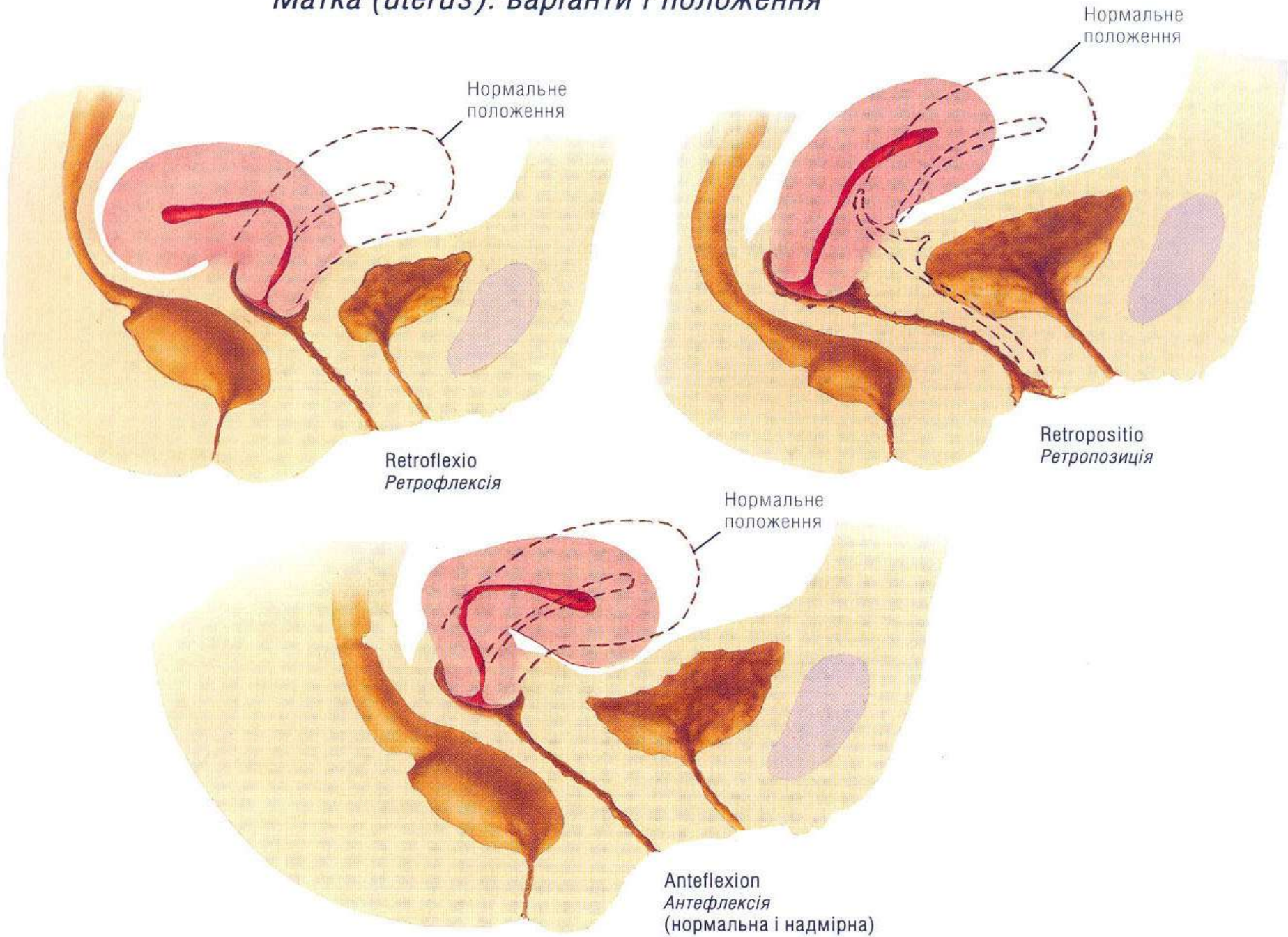
Серединний (сагітальний) переріз



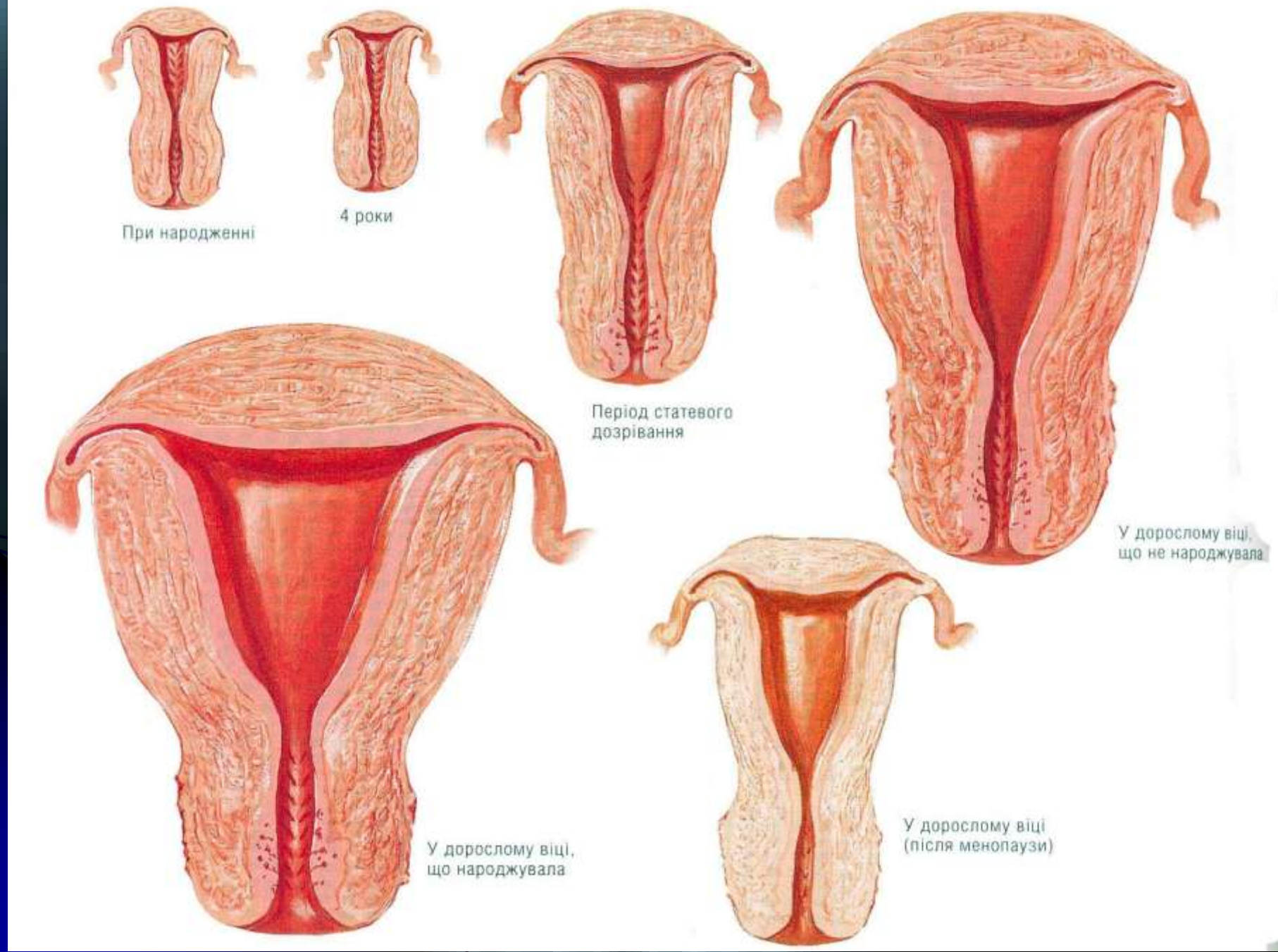

ovum
fallopian tube (oviduct)
path of ovum
implanted embryo
fundus of uterus
sperm cell
site of fertilization
ovary
ovarian ligament
broad ligament
fimbriae
ovum
ovarian follicle (ruptured)
corpus luteum
maturing follicle
body of uterus
cervical canal
cervix
path of spermatozoa
vagina
rugae
greater vestibular (Bartholin's) gland
clitoris
labium minus
urethral meatus
labium majus
vaginal opening
vulva
(external genitalia)



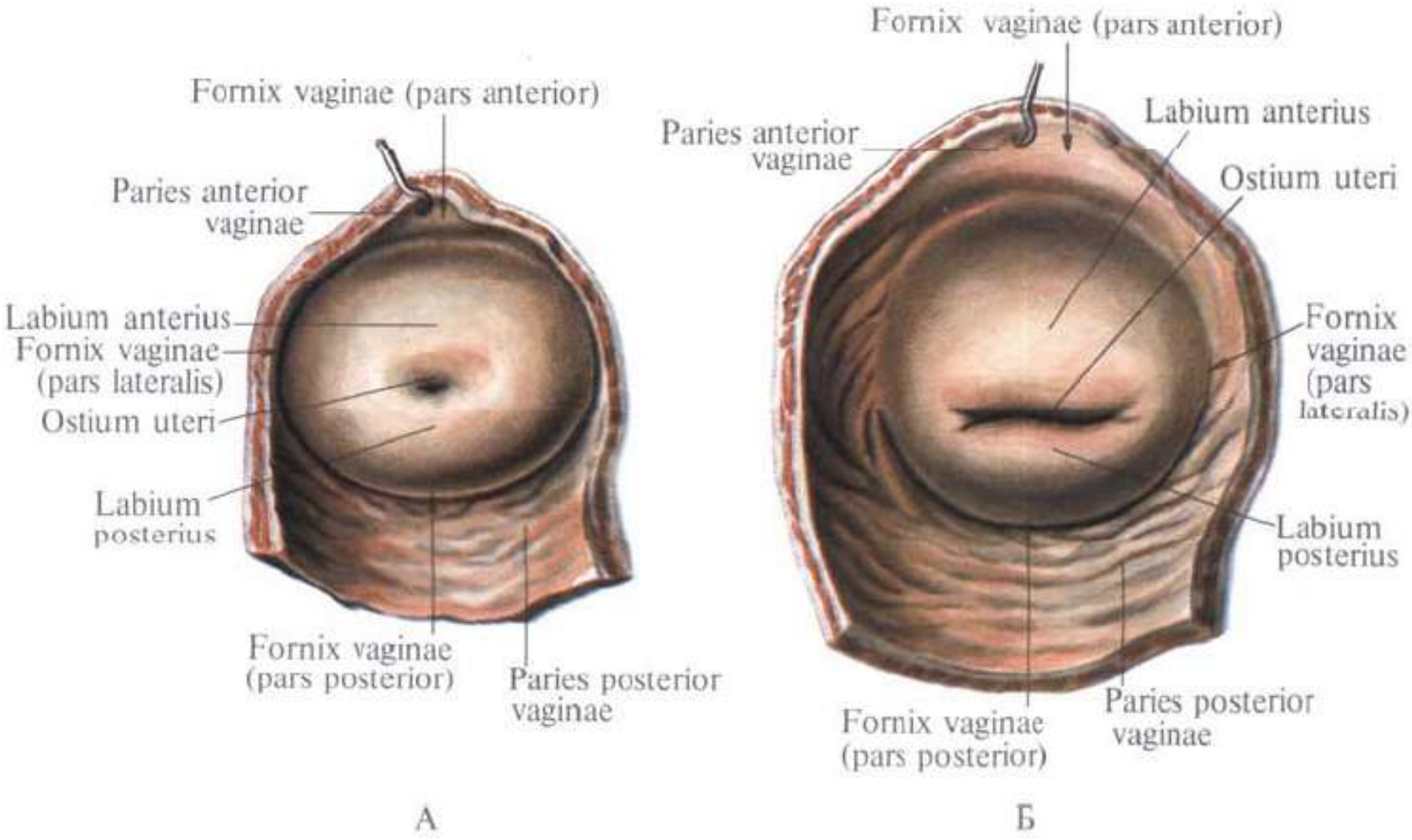
Матка (uterus): варіанти і положення



Матка (uterus): вікові зміни

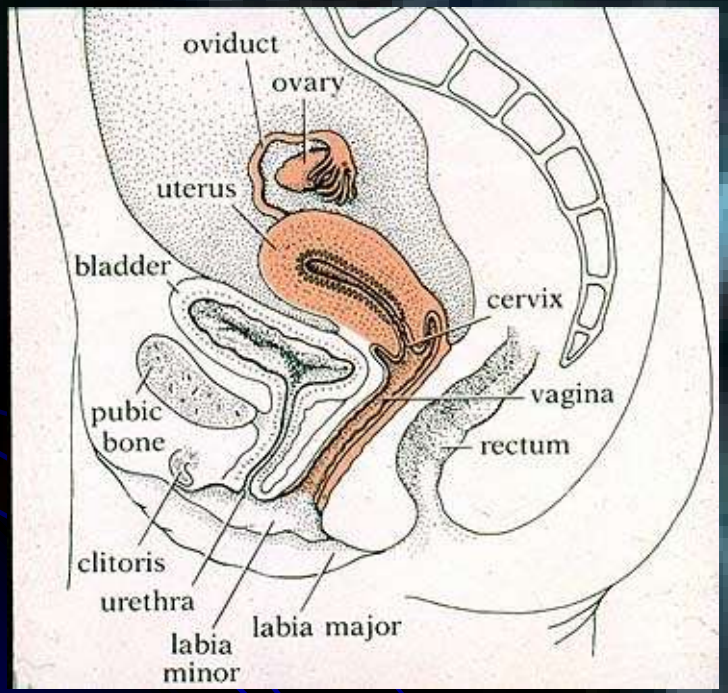


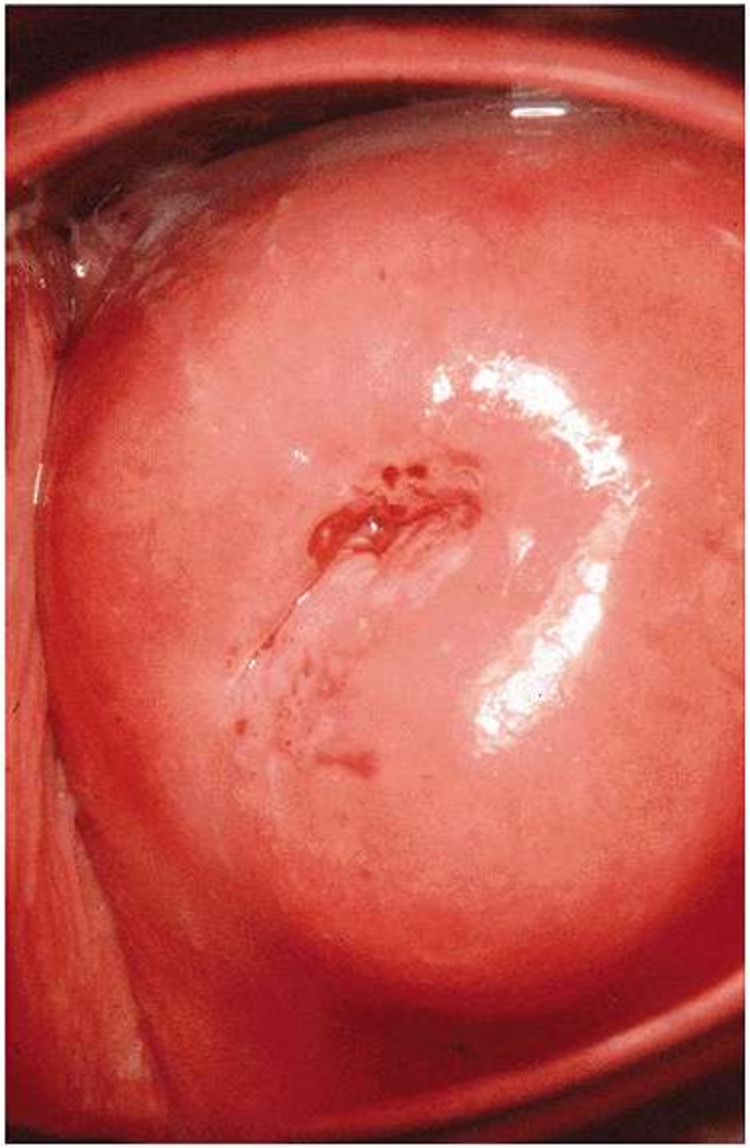
Склепіння піхви жінки:
А – жінка, яка не народжувала;
Б – жінка,яка народжувала

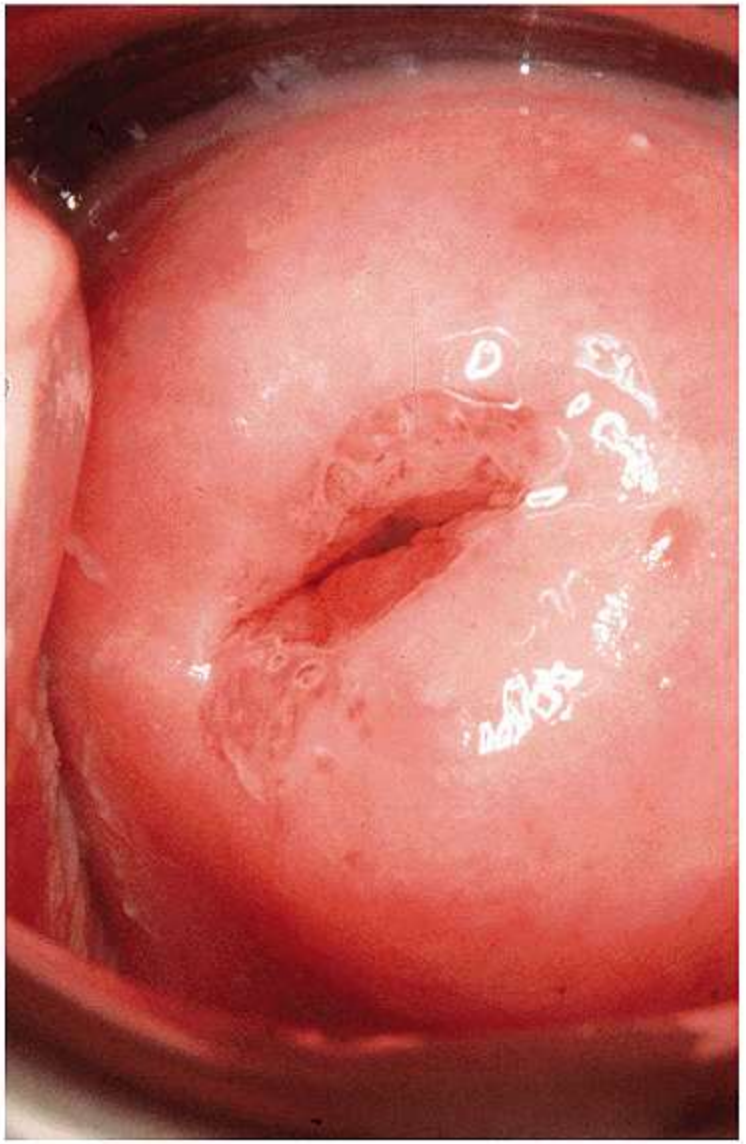


CERVIX

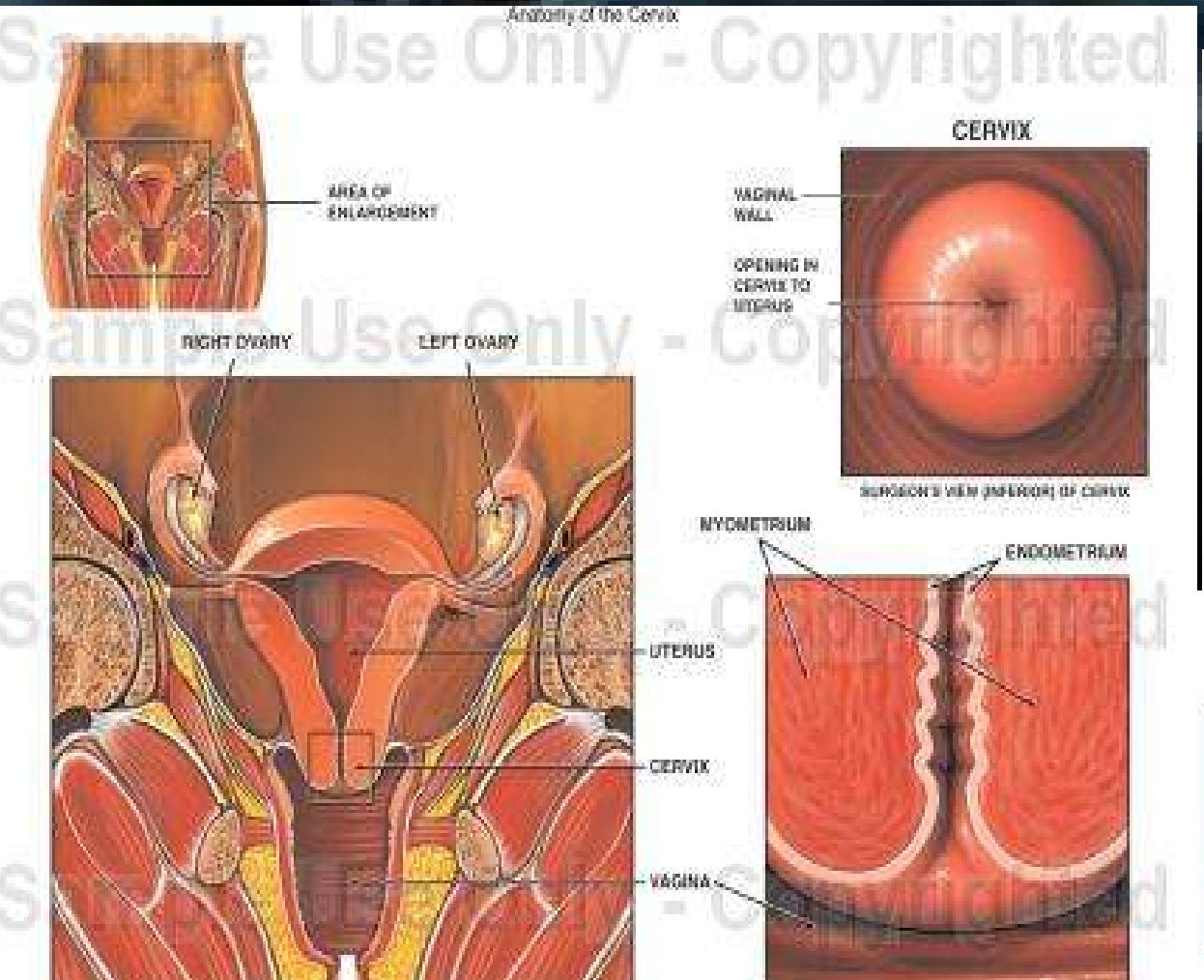
The opening from the vagina into the womb allows menstrual blood exit and sperm in.

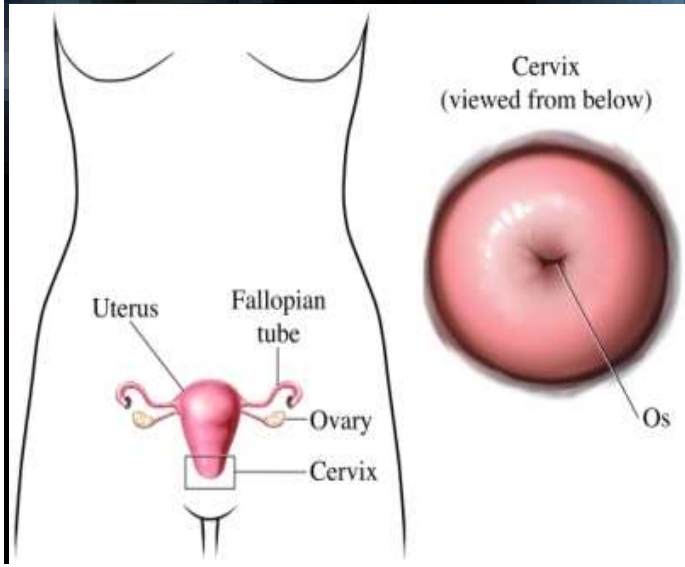


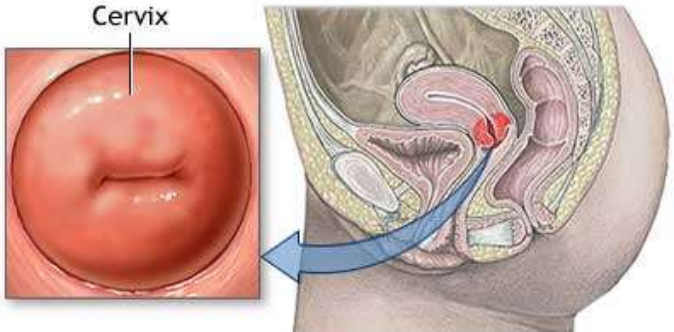


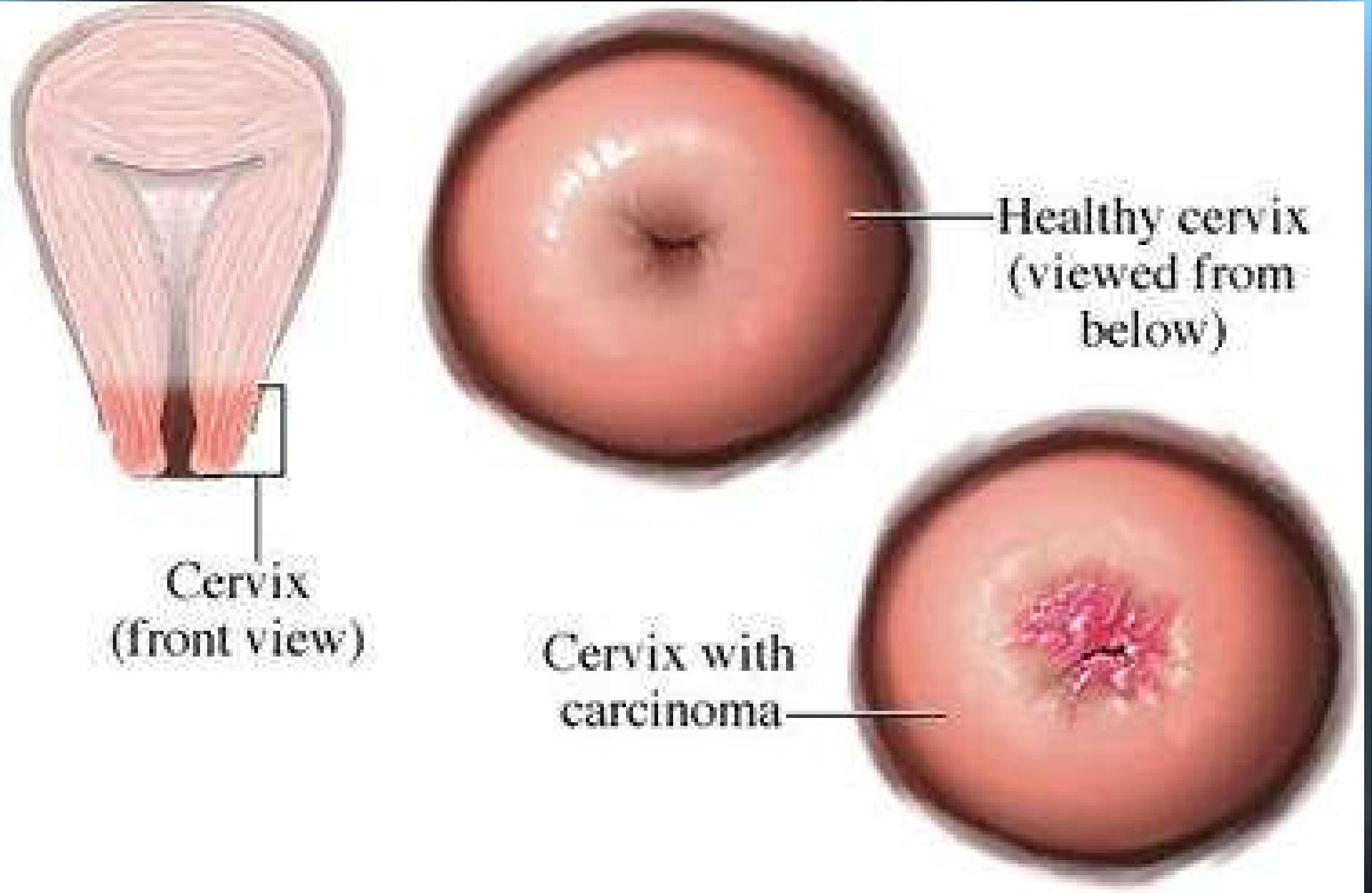


Cervix


Anatomy of the Cervix
AREA OF ENLARGEMENT
RIGHT OVARY
LEFT OVARY
UTERUS
CERVIX
VAGINA
CERVIX
VAGINAL WALL
OPENING IN CERVIX TO UTERUS
MYOMETRIUM
ENDOMETRIUM

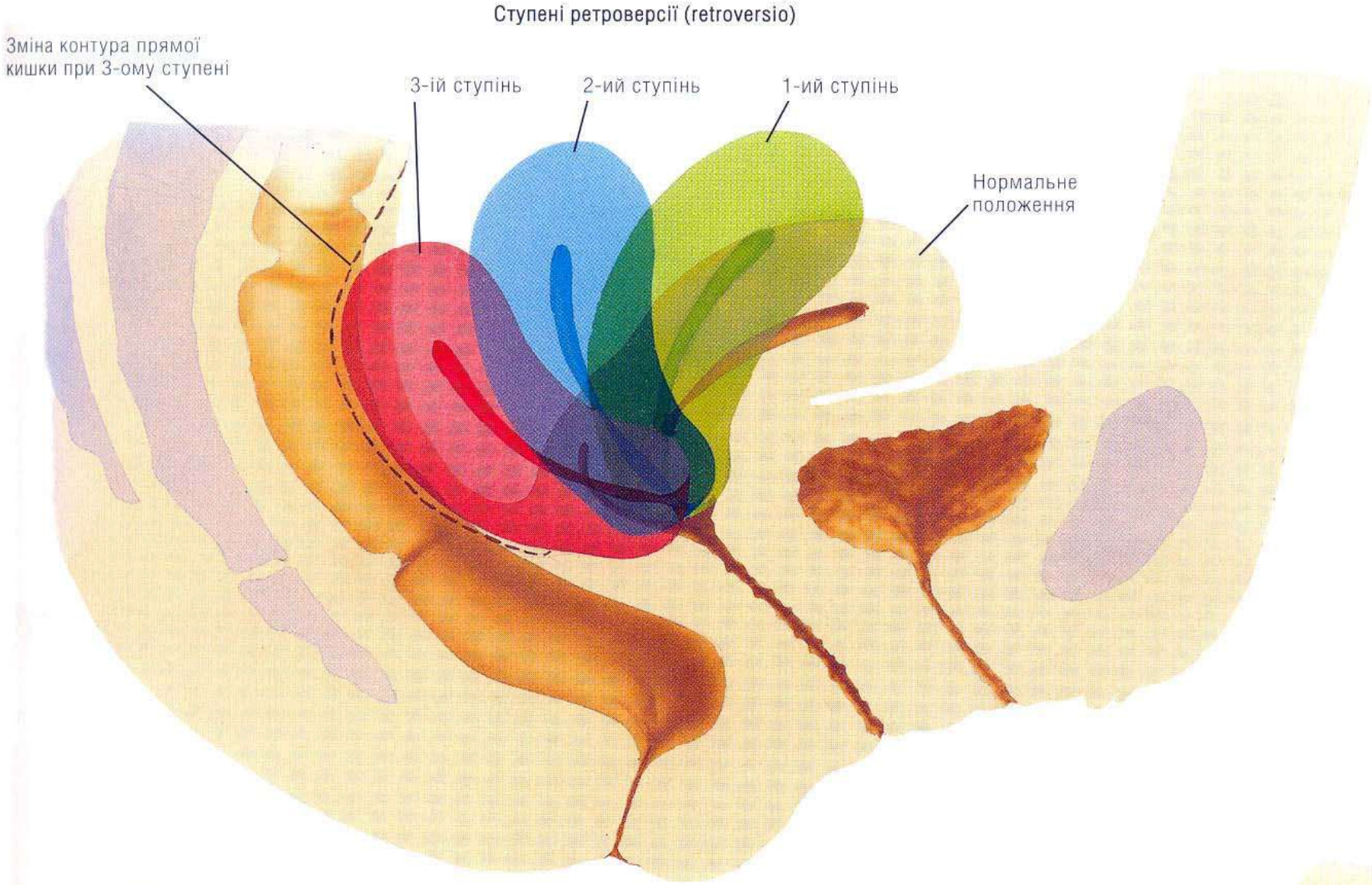

Uterus
Fallopian tube
Ovary
Cervix
Cervix
(viewed from below)
Os


Cervix

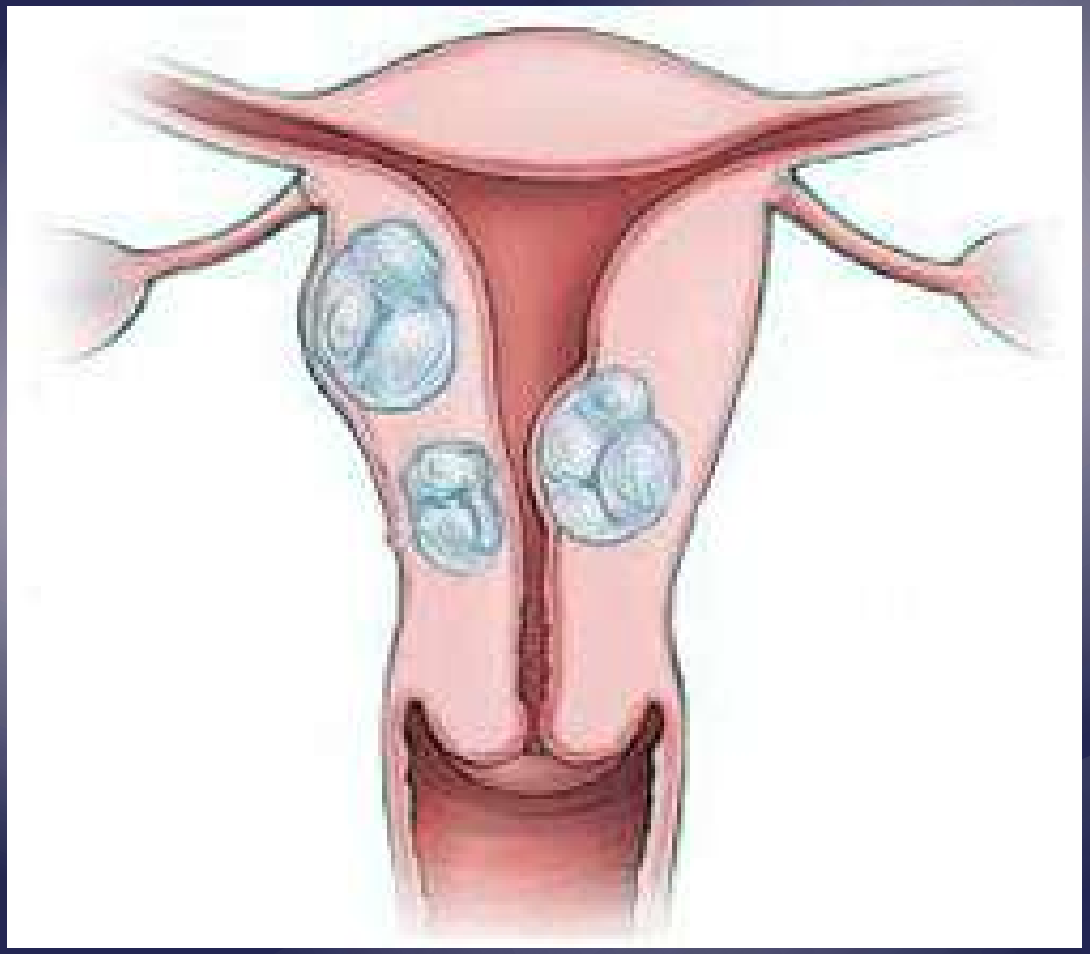

Cervix
(front view)
Healthy cervix
(viewed from
below)
Cervix with
carcinoma

Norma

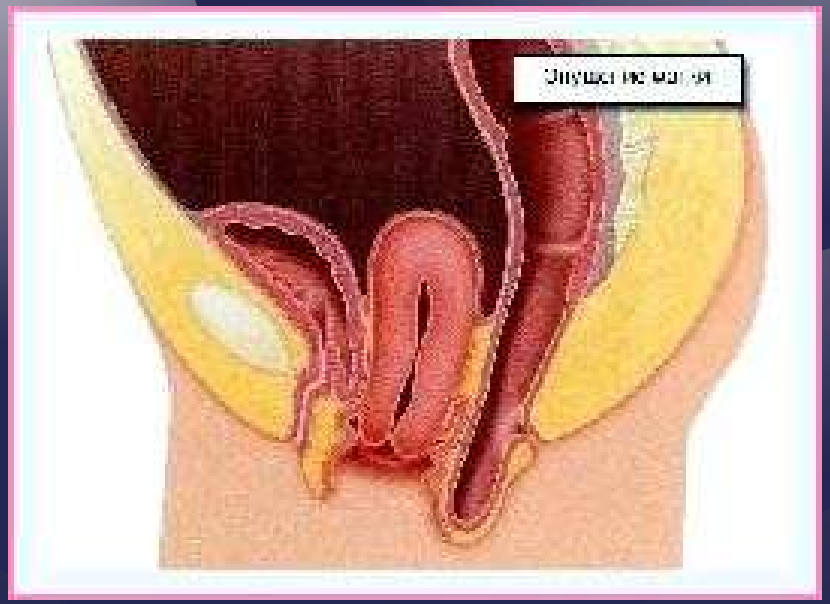
Cancer

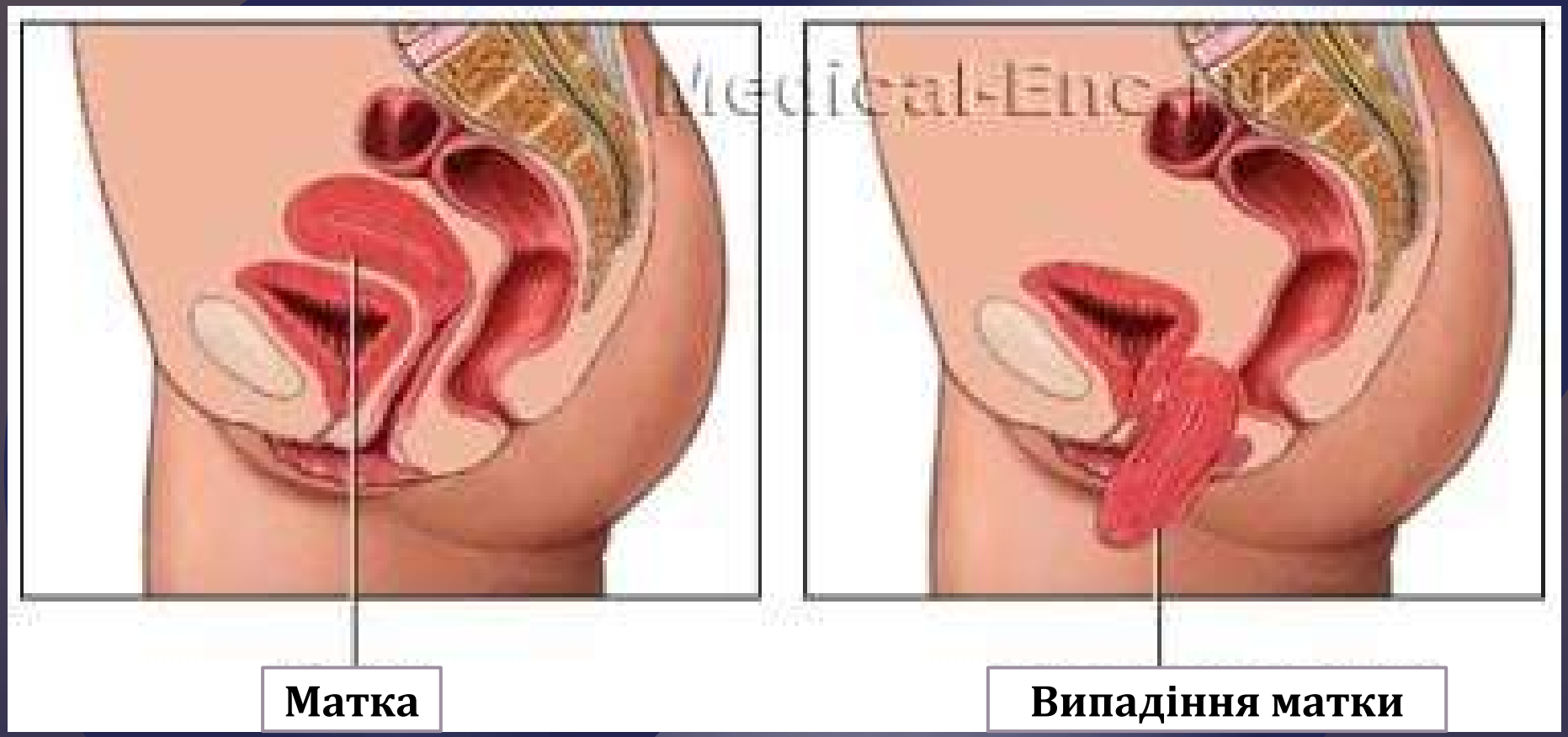

Ступені ретроверсії (retroversio)
Зміна контура прямої кишки при 3-ому ступені
3-ій ступінь
2-ий ступінь
1-ий ступінь
Нормальне положення

Fibroids - benign tumors of the uterus with fibrous and muscle tissue



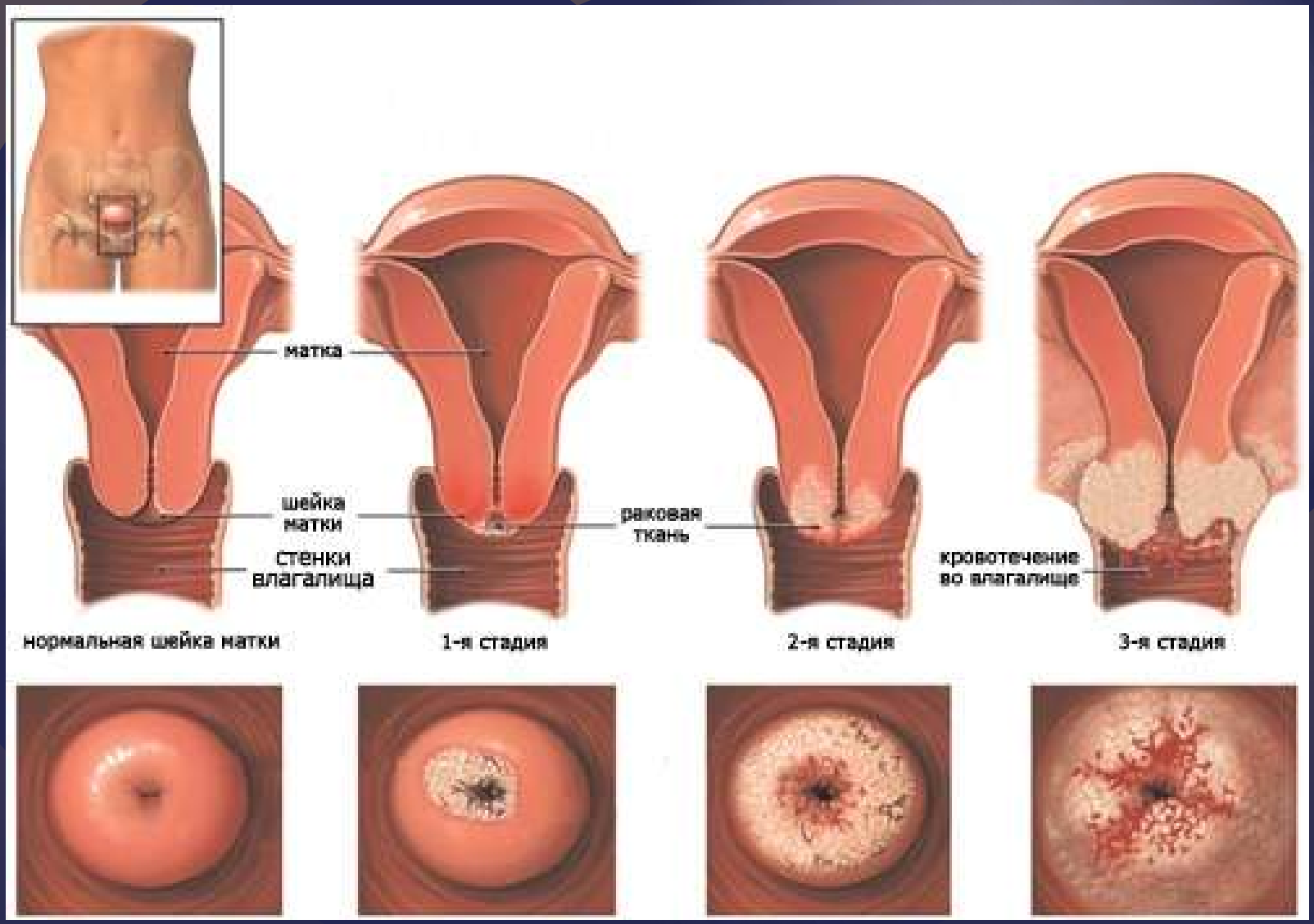
PROLAPSE - occurs when pelvic floor muscles and ligaments stretch and weaken (during pregnancy and childbirth), providing inadequate support for the uterus. The uterus then slips down into or protrudes out of the vagina.

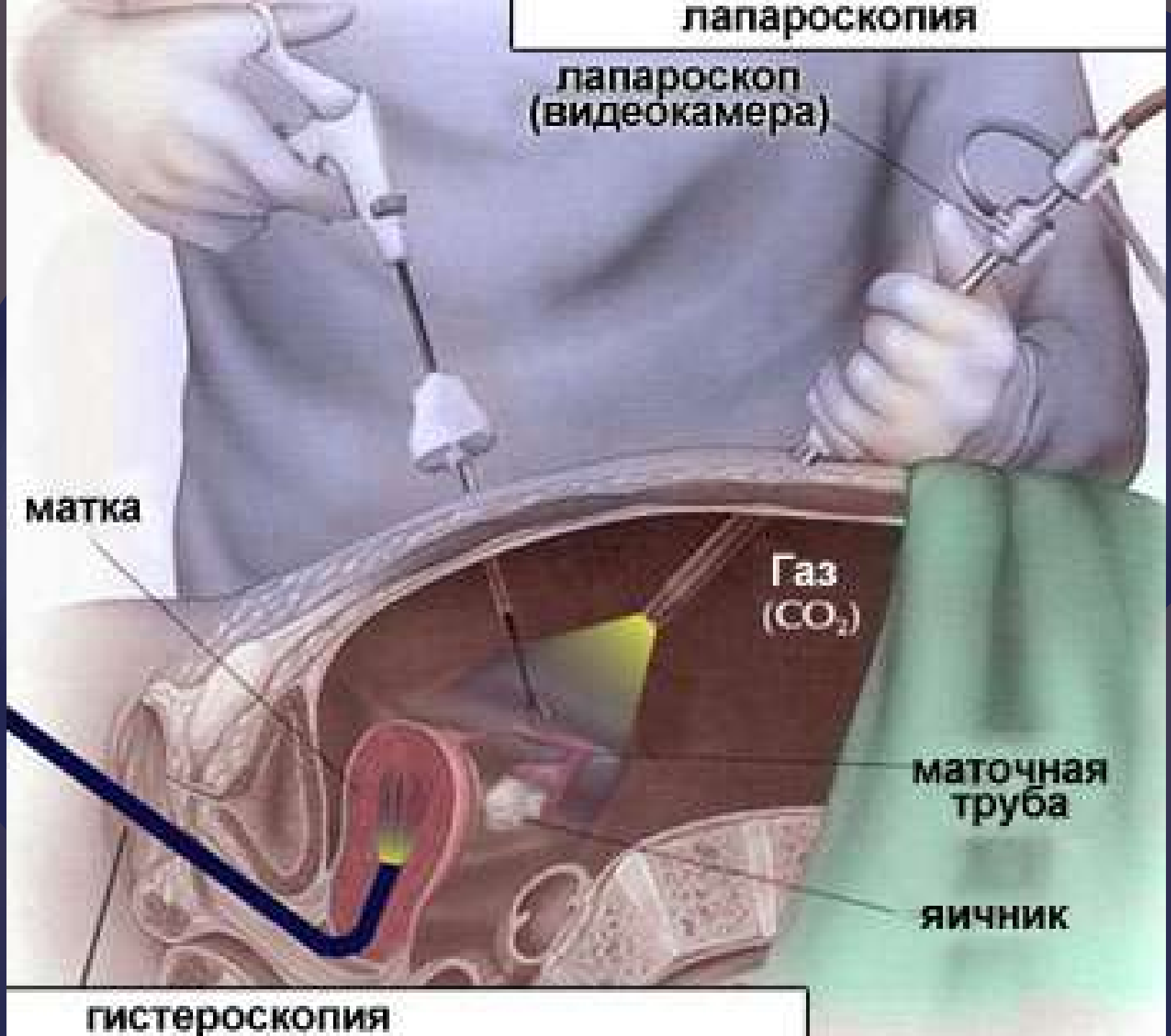


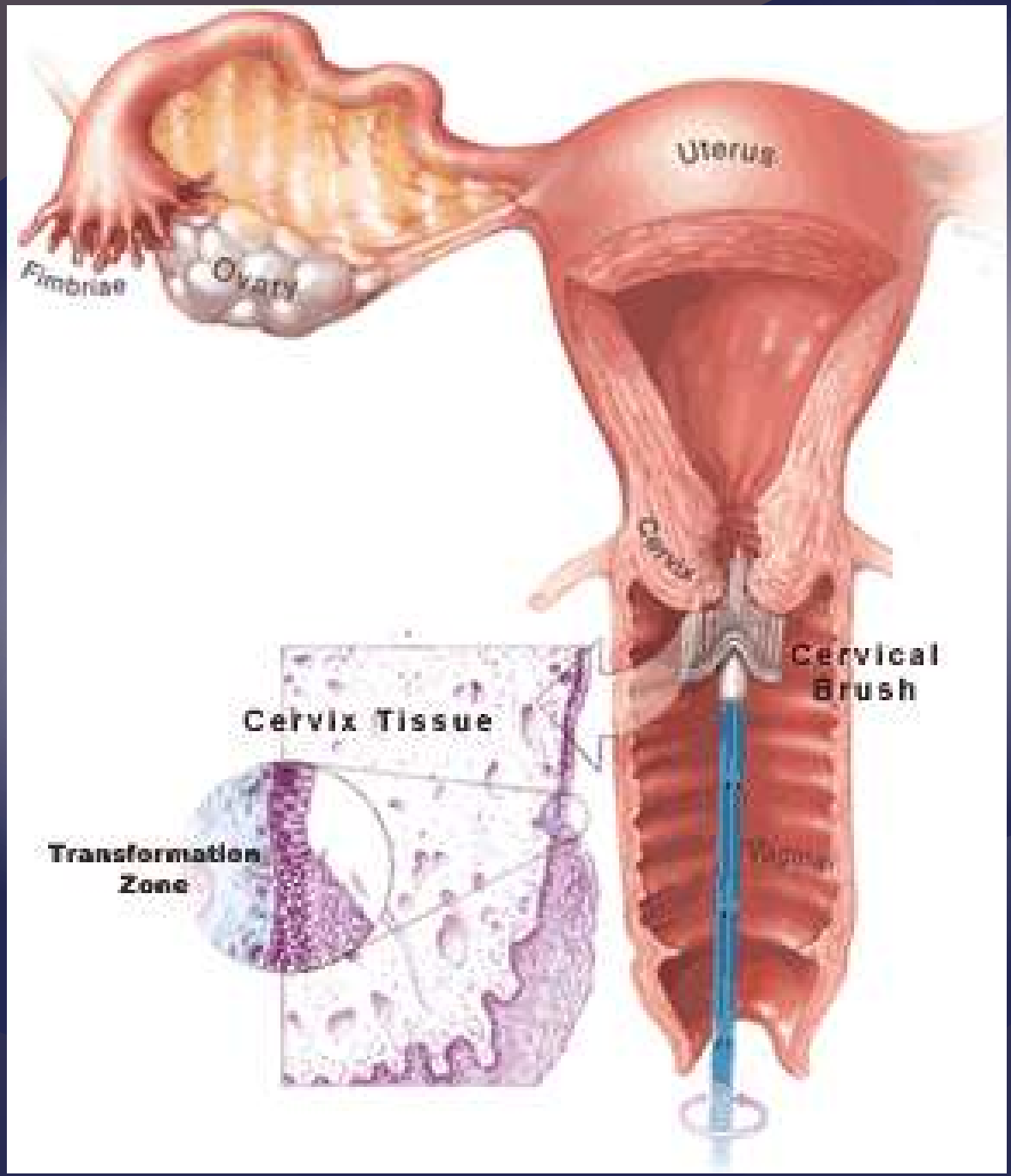

Матка
Випадіння матки

IMPACT loss uterus:_ Sagging uterus, vagina distortion,_ A violation of peristalsis and urine, rectal prolapse

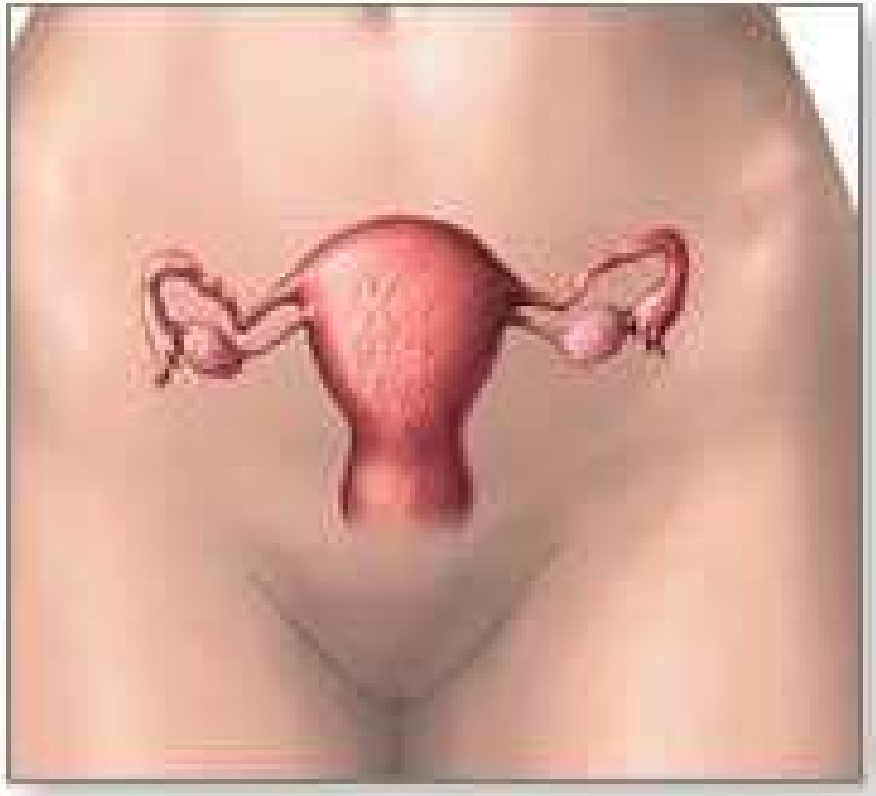
Cervical Cancer

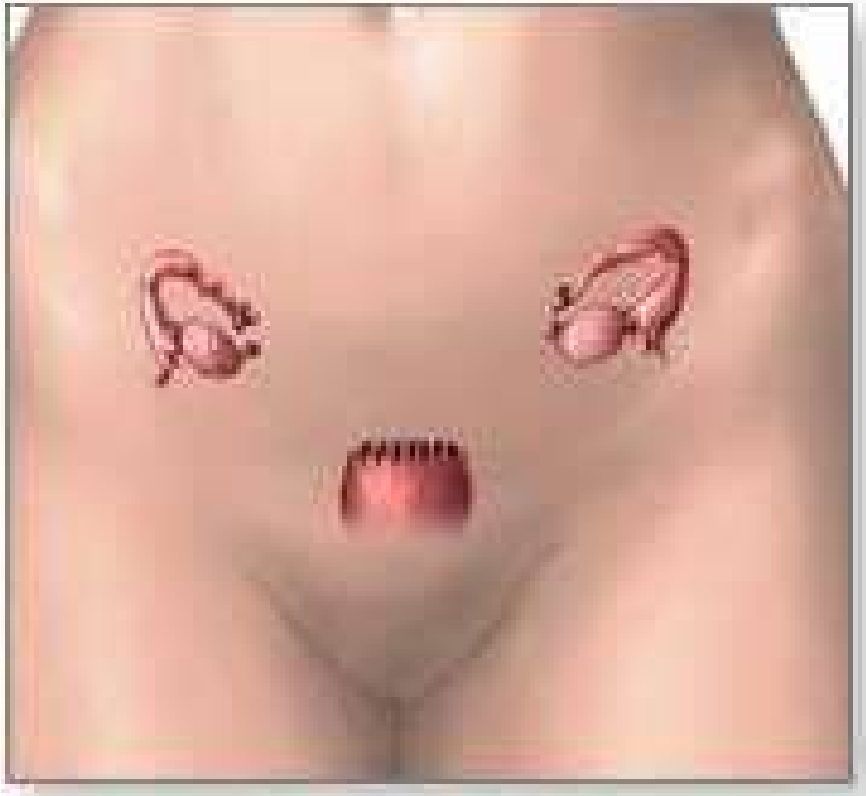



лапароскопия
лапароскоп
(видеокамера)
матка
Газ
(CO_2)
маточная
труба
яичник
гистероскопия

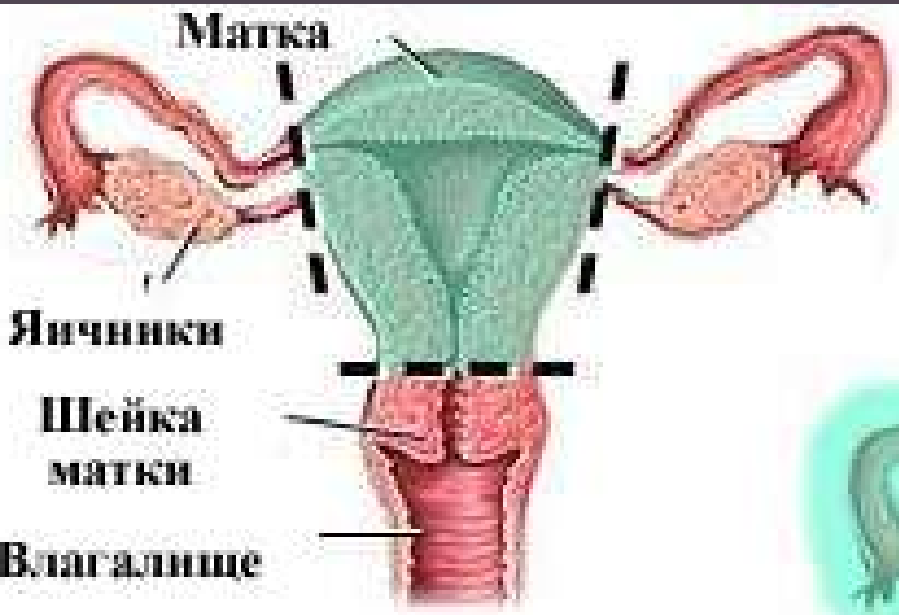

Uterus
Fimbriae
Ovary
Cervix
Cervical Brush
Cervix Tissue
Transformation Zone
Vagina

Hysterectomy (hysterectomy) – it is a surgical removing of the uterus.

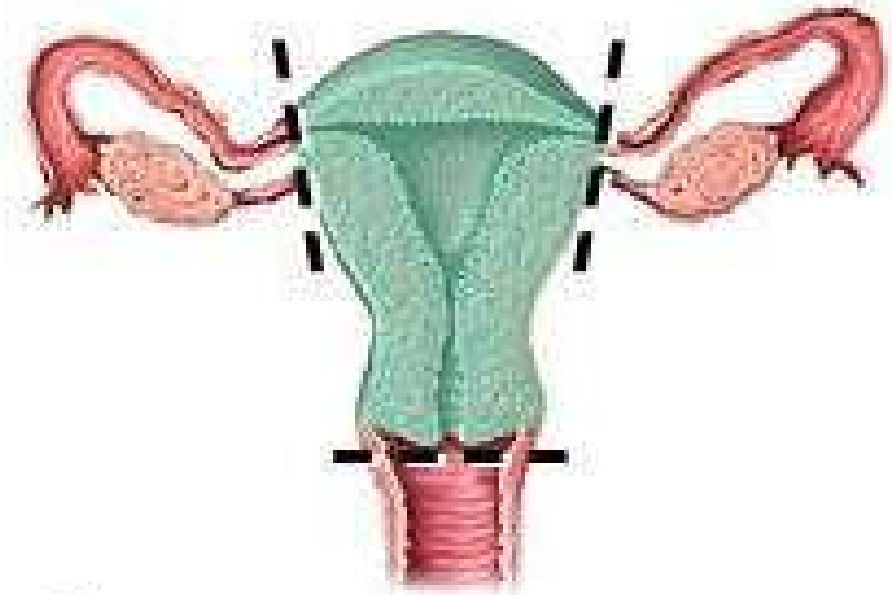




Picture: Hysterectomy

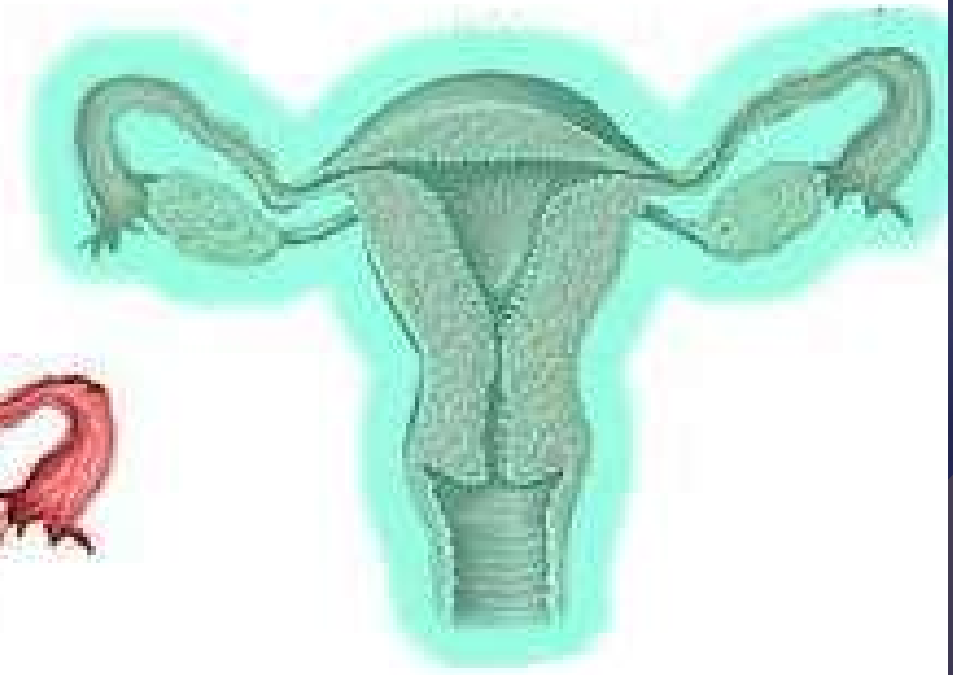


Частичная



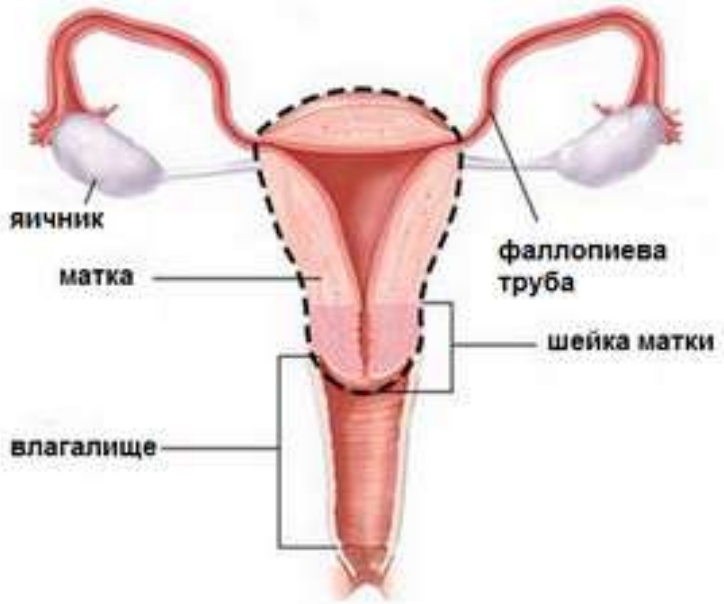
Простая гистерэктомия

Во время гистерэктомии может быть удалена матка, шейка матки, и яичники

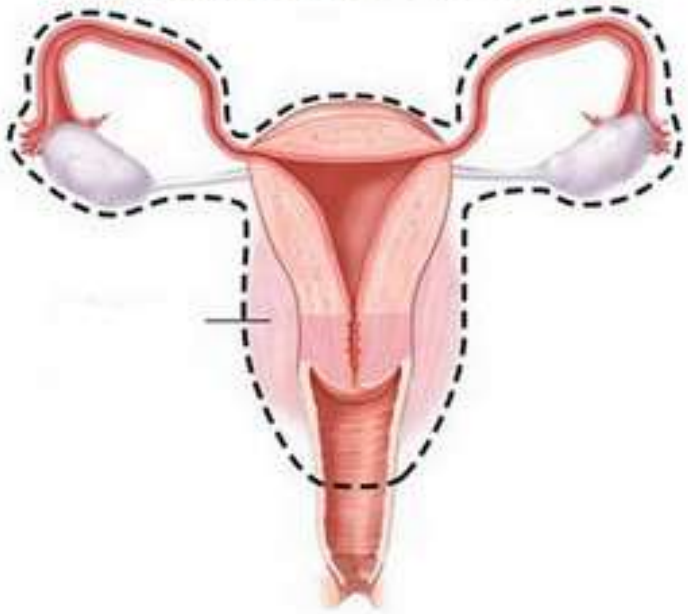


Радикальная гистерэктомия

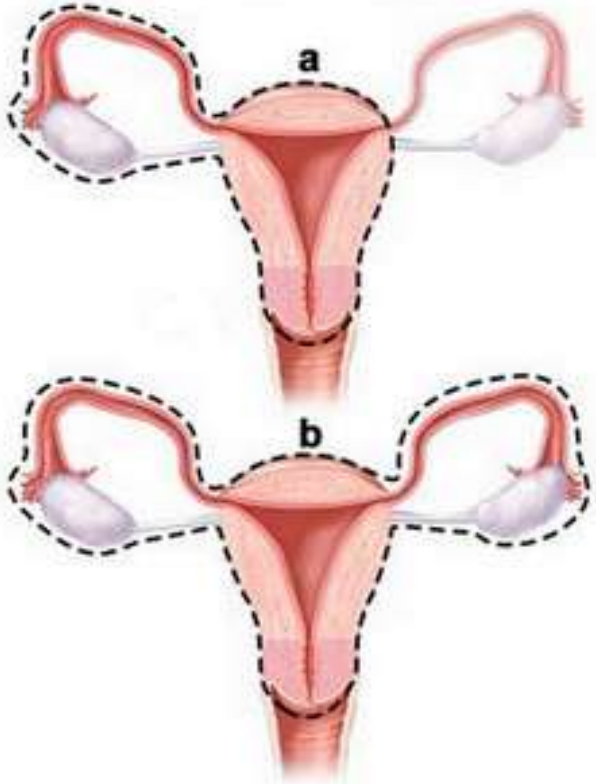
Полная гистерэктомия



Радикальная гистерэктомия



Полная гистерэктомия с удалением придатков матки

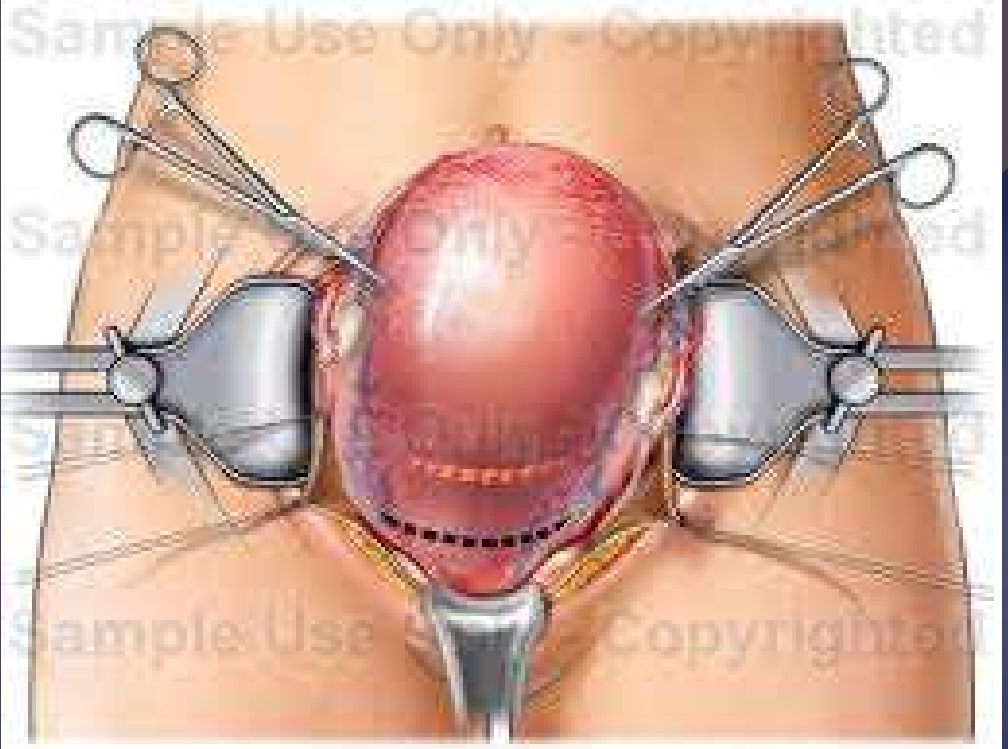


1. Supravaginal amputation of the uterus (hysterectomy subtotal) - surgery that involves removal of the uterine cervix while maintaining (laparoscopic subtotal hysterectomy, subtotal abdominal histrektomiya).

Supravaginal amputation of the uterus without appendages - square selection area removal.

that involves the removal of the body and cervix (total hysterectomy laparoscopic, abdominal hysterectomy total).

Hysterectomy without appendages (total hysterectomy) - square selection area removal

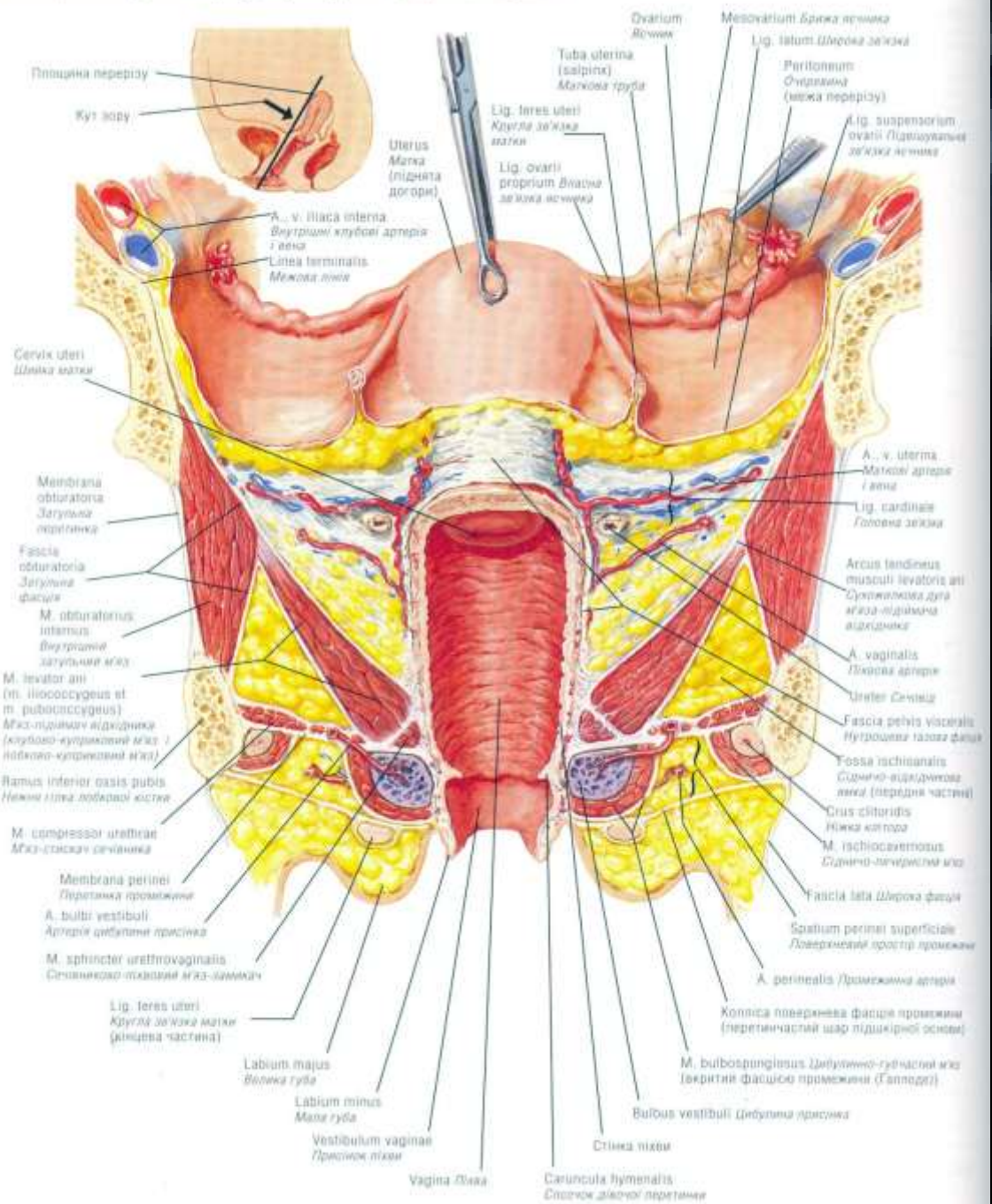


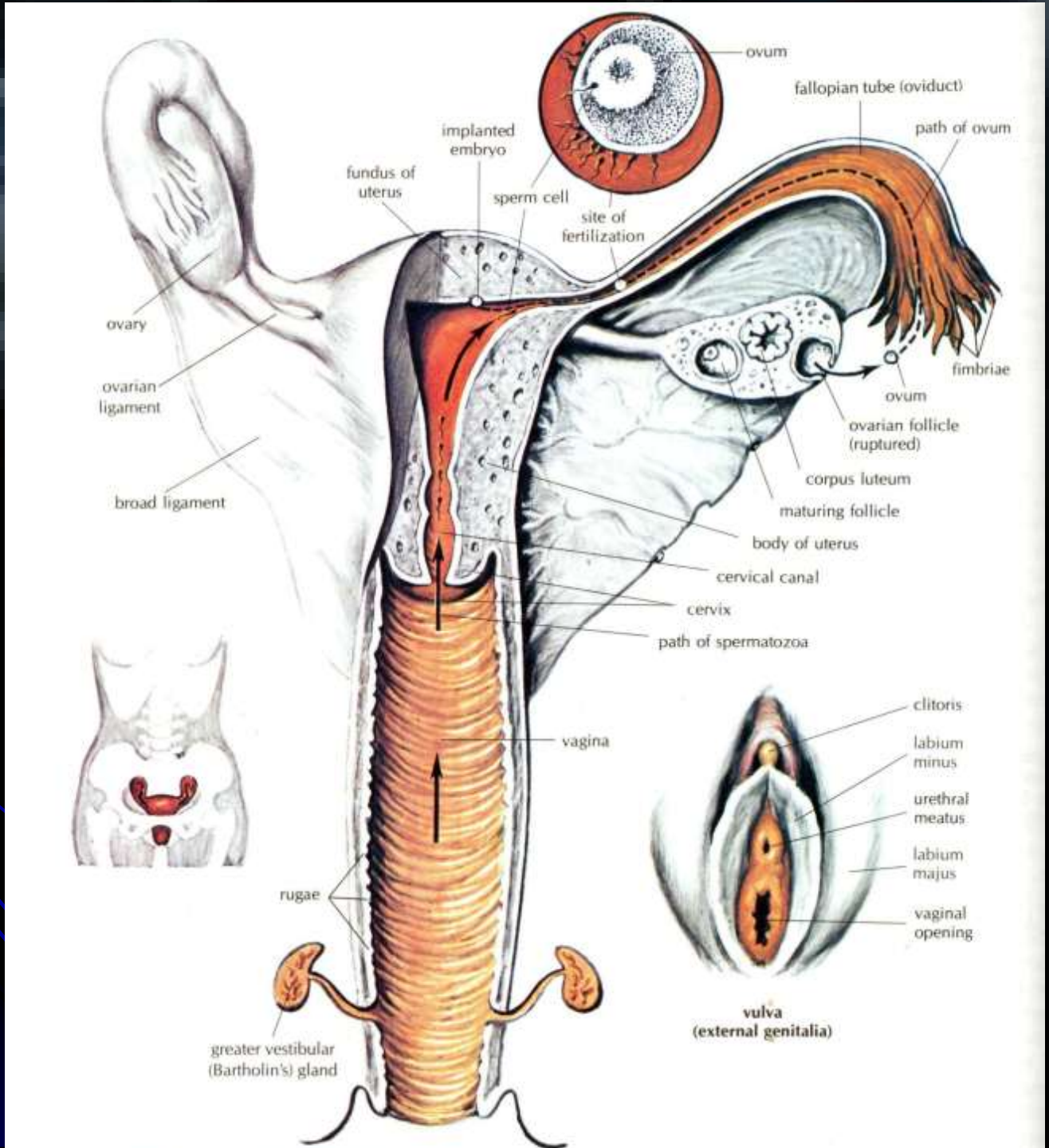

Abdominal Hysterectomy
Incision
Uterus

VAGINA

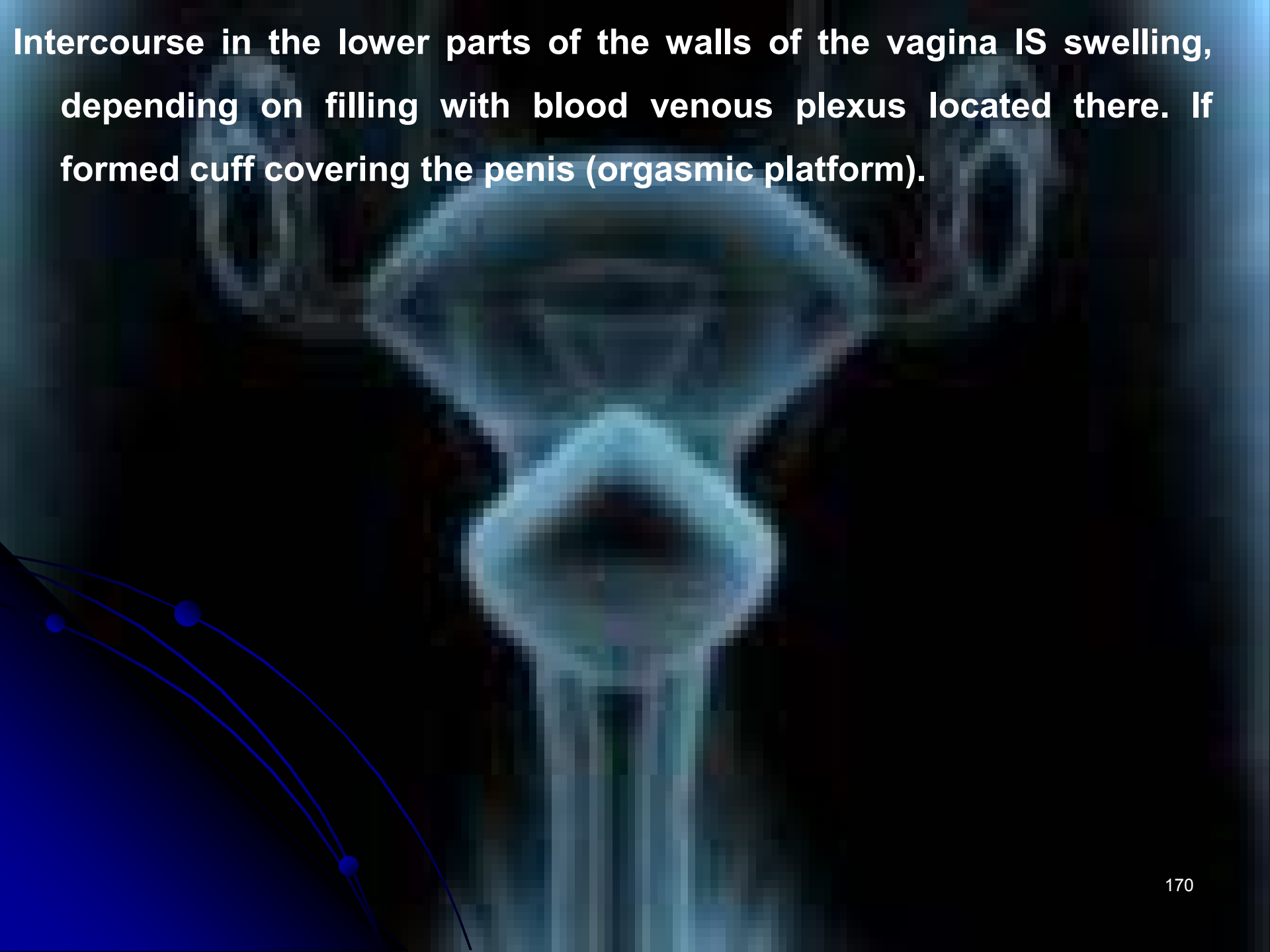
s. COLPOS

Матка (uterus), піхва (vagina) й органи, що їх оточують

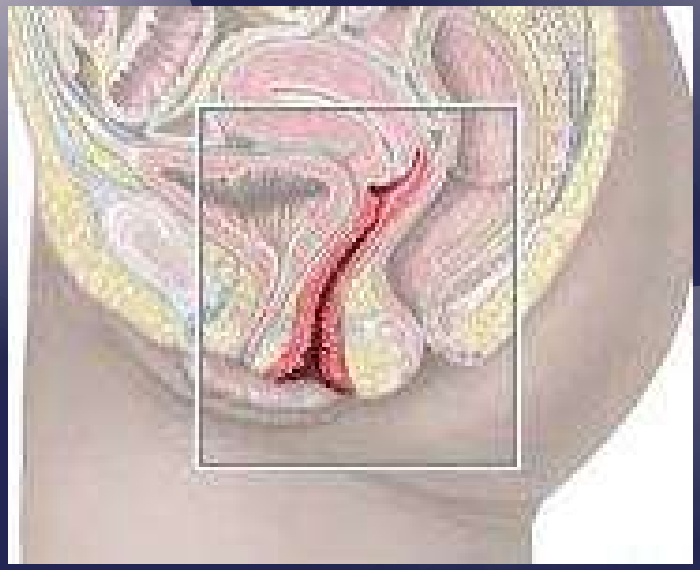



ovum
fallopian tube (oviduct)
path of ovum
implanted embryo
fundus of uterus
sperm cell
site of fertilization
ovary
ovarian ligament
broad ligament
fimbriae
ovum
ovarian follicle (ruptured)
corpus luteum
maturing follicle
body of uterus
cervical canal
cervix
path of spermatozoa
vagina
rugae
greater vestibular (Bartholin's) gland
clitoris
labium minus
urethral meatus
labium majus
vaginal opening
vulva
(external genitalia)

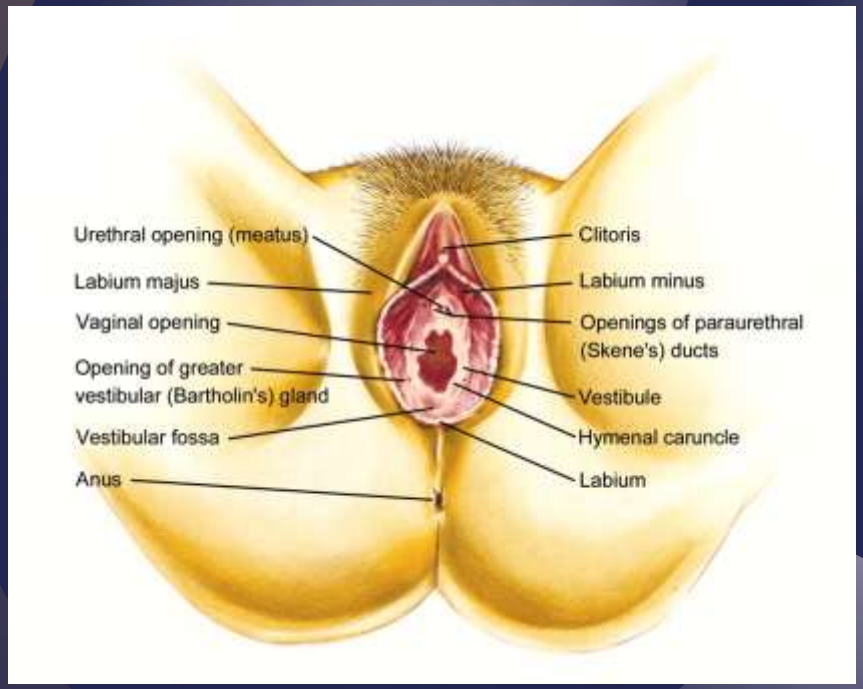
Intercourse in the lower parts of the walls of the vagina IS swelling, depending on filling with blood venous plexus located there. If formed cuff covering the penis (orgasmic platform).



Obesity (vaginitis) - inflammation of the vagina caused by specific flora or fungus.

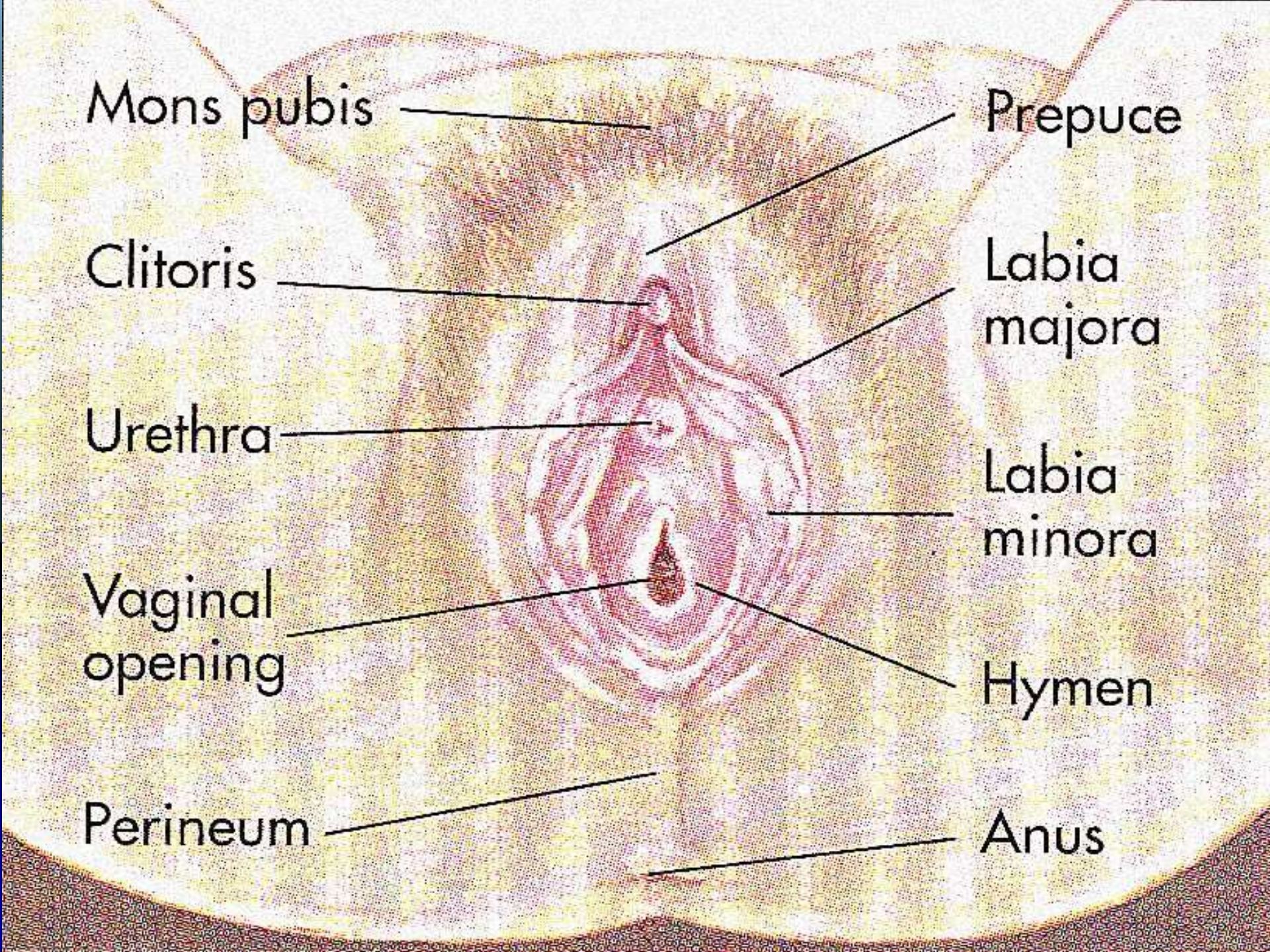


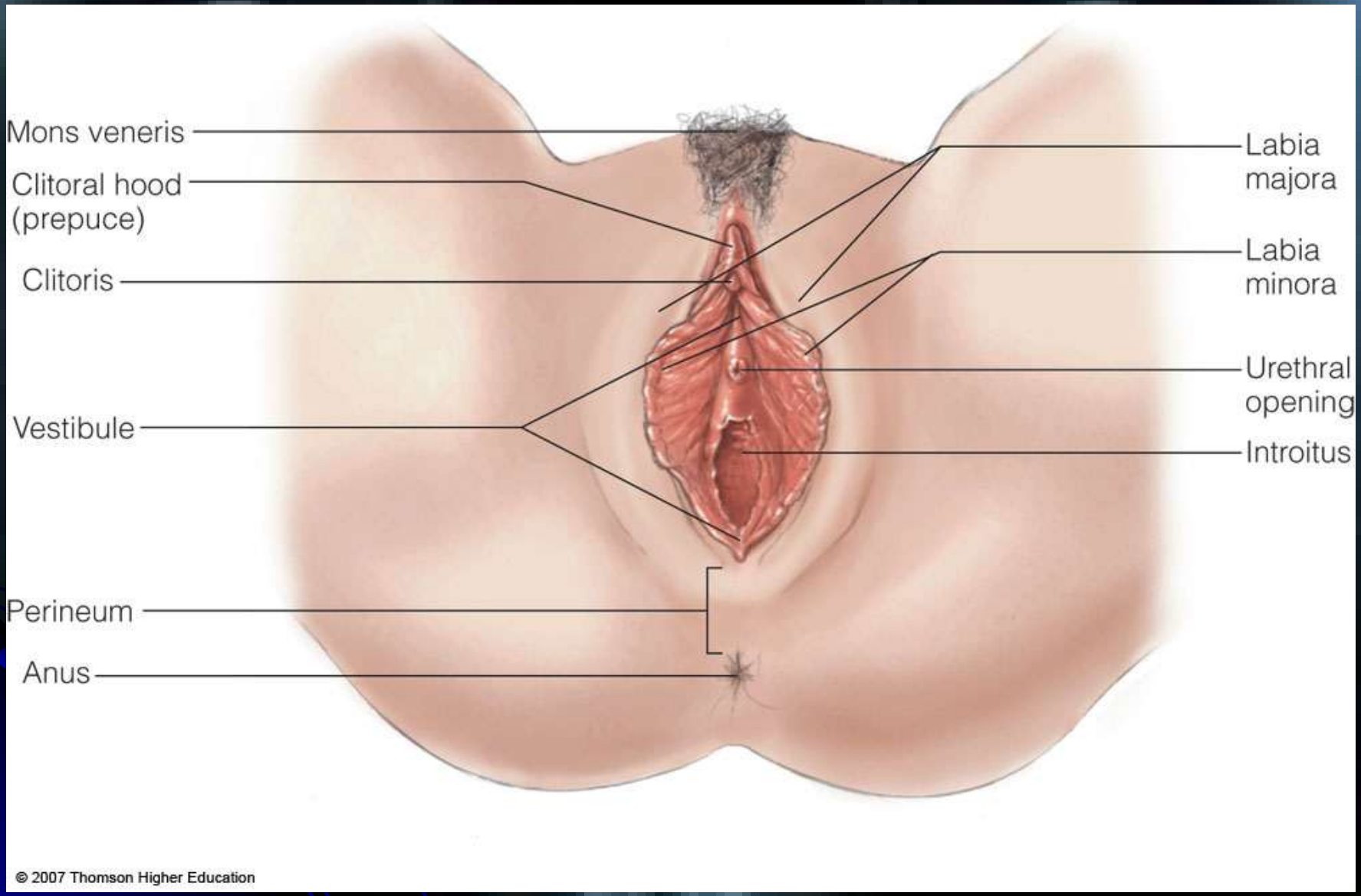
Vulva



- The female external genital organs are also known as the **vulva**.
- It n consists of the *labia majora* and *labia minora* clitoris, opening of the urethra, and the opening of the vagina.

External female genitalia
CONSTITUTE a female genital area.

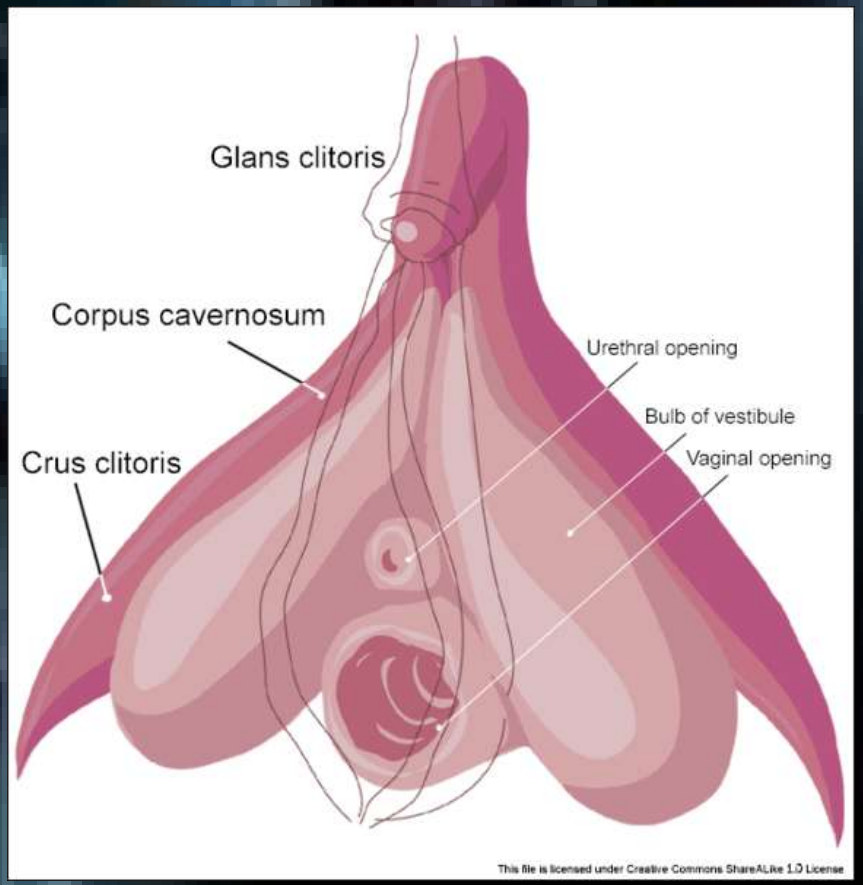

Mons pubis
Clitoris
Urethra
Vaginal opening
Perineum
Prepuce
Labia majora
Labia minora
Hymen
Anus

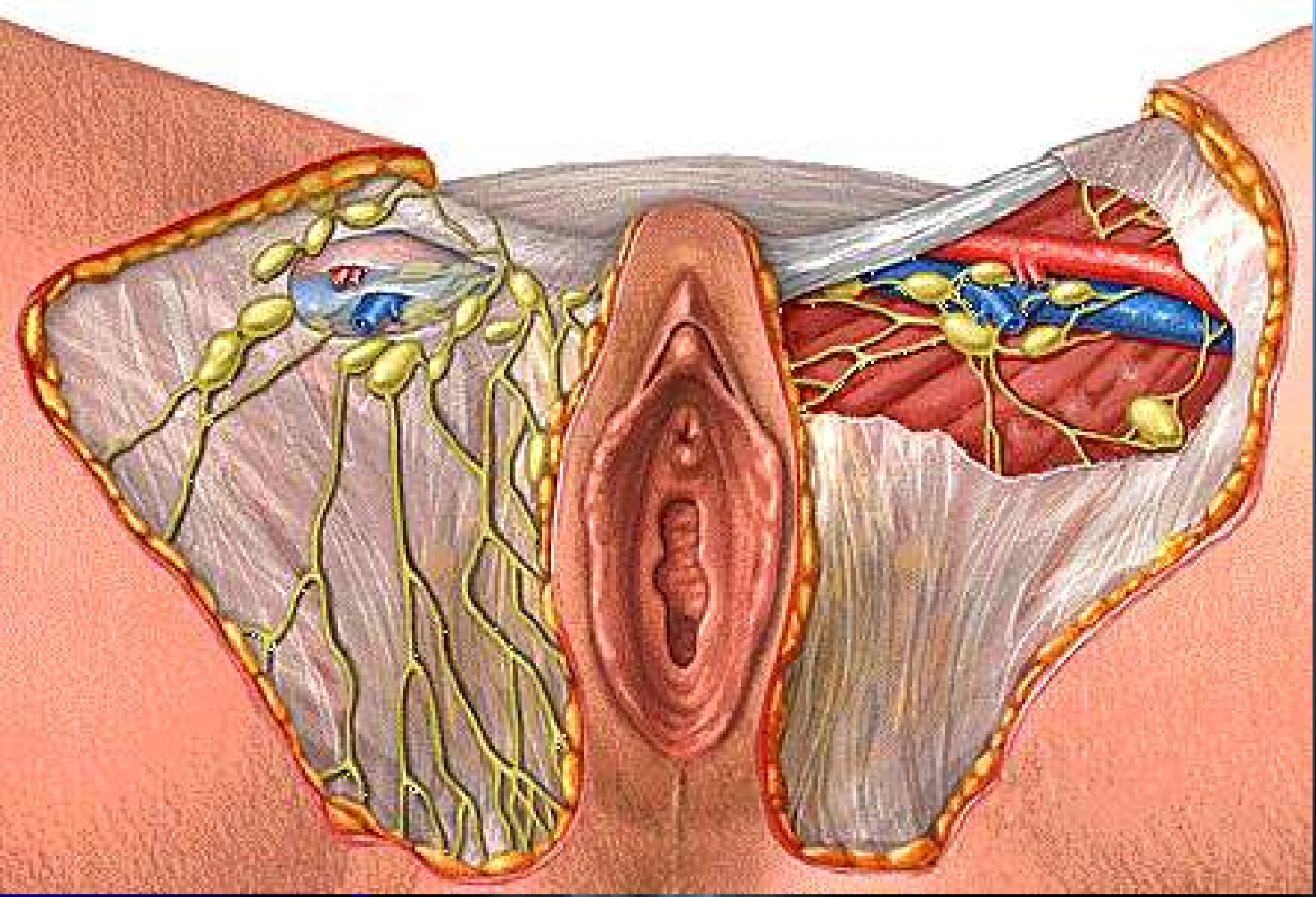


The external genital structures of the mature female.

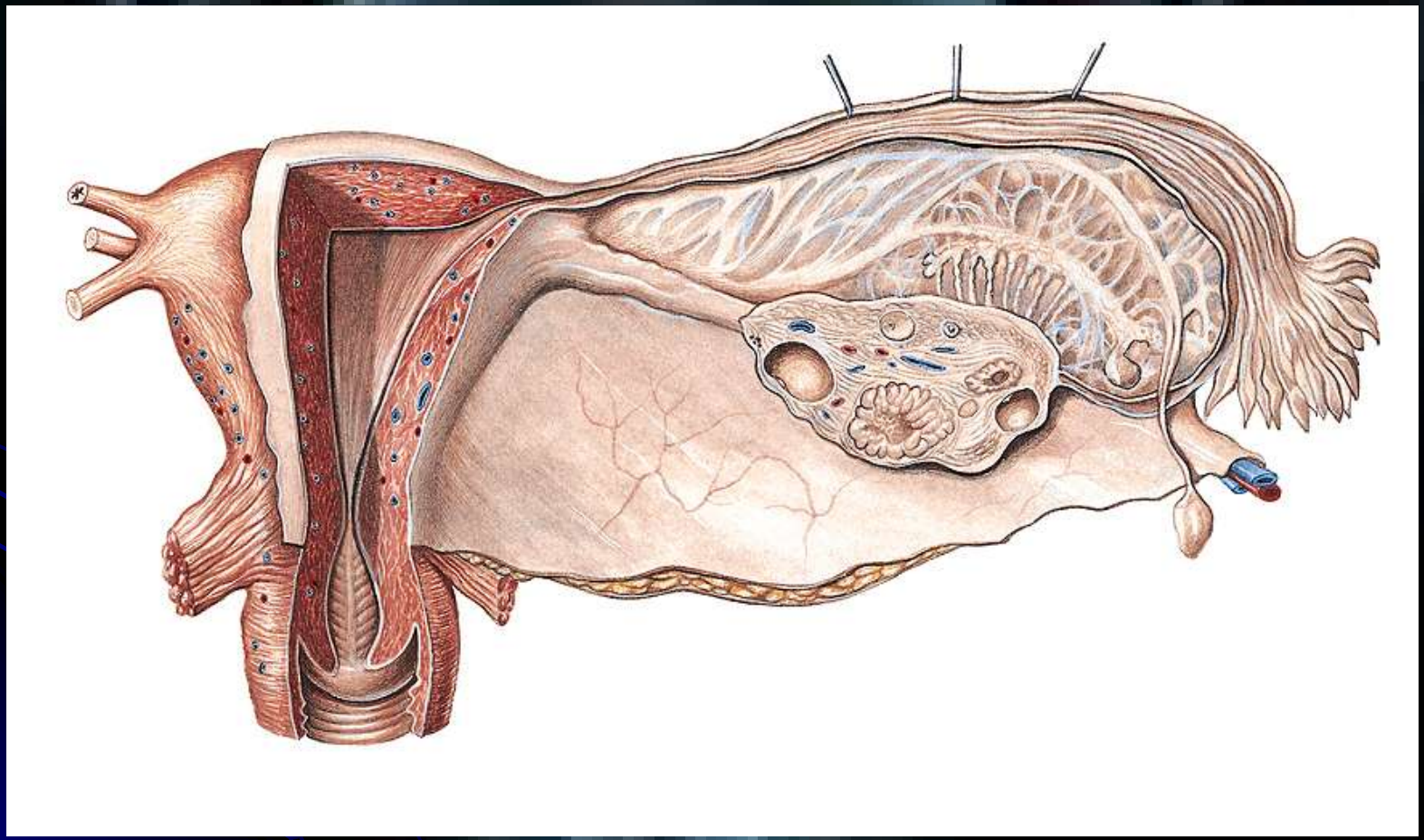
Clitoris

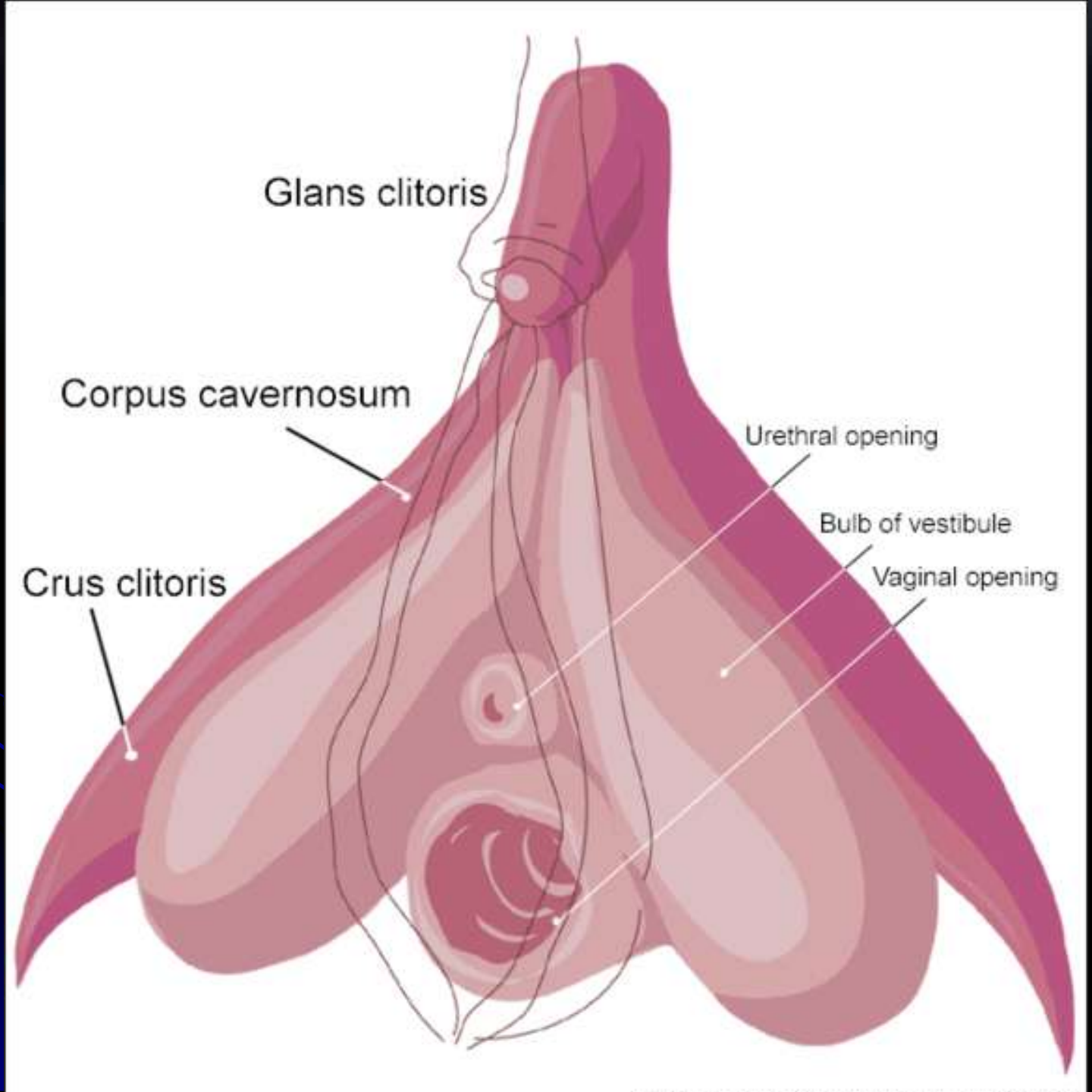
The clitoris is a female sexual organ. In humans, the visible knob-like portion is located near the anterior junction of the labia minora, above the opening of the vagina. The clitoris does not contain the distal portion of the urethra and functions solely to induce sexual pleasure. The only known exception to this is in the spotted hyena, where the urogential system is modified so that the female urinates, mates and gives birth via an enlarged, erectile clitoris.

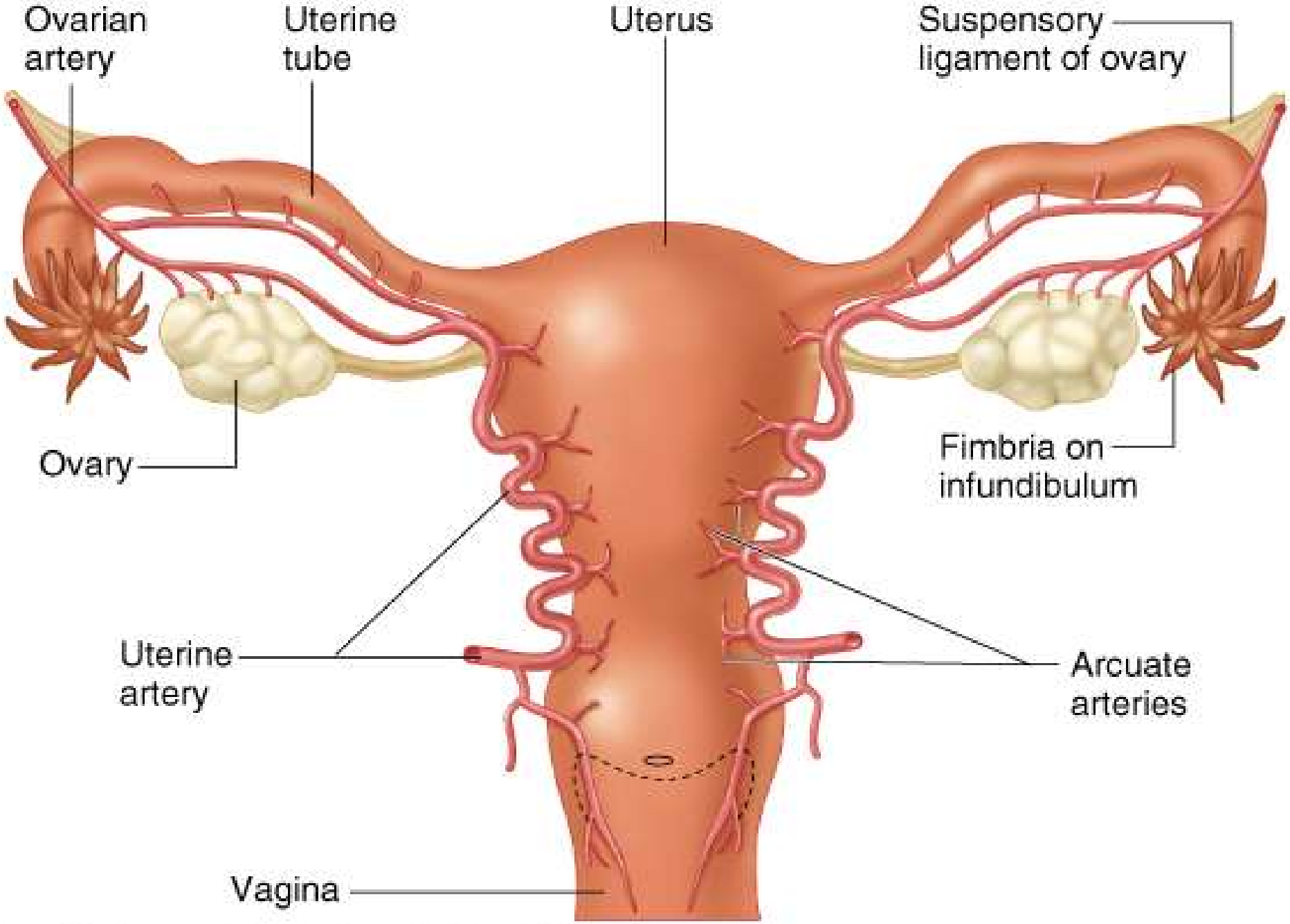


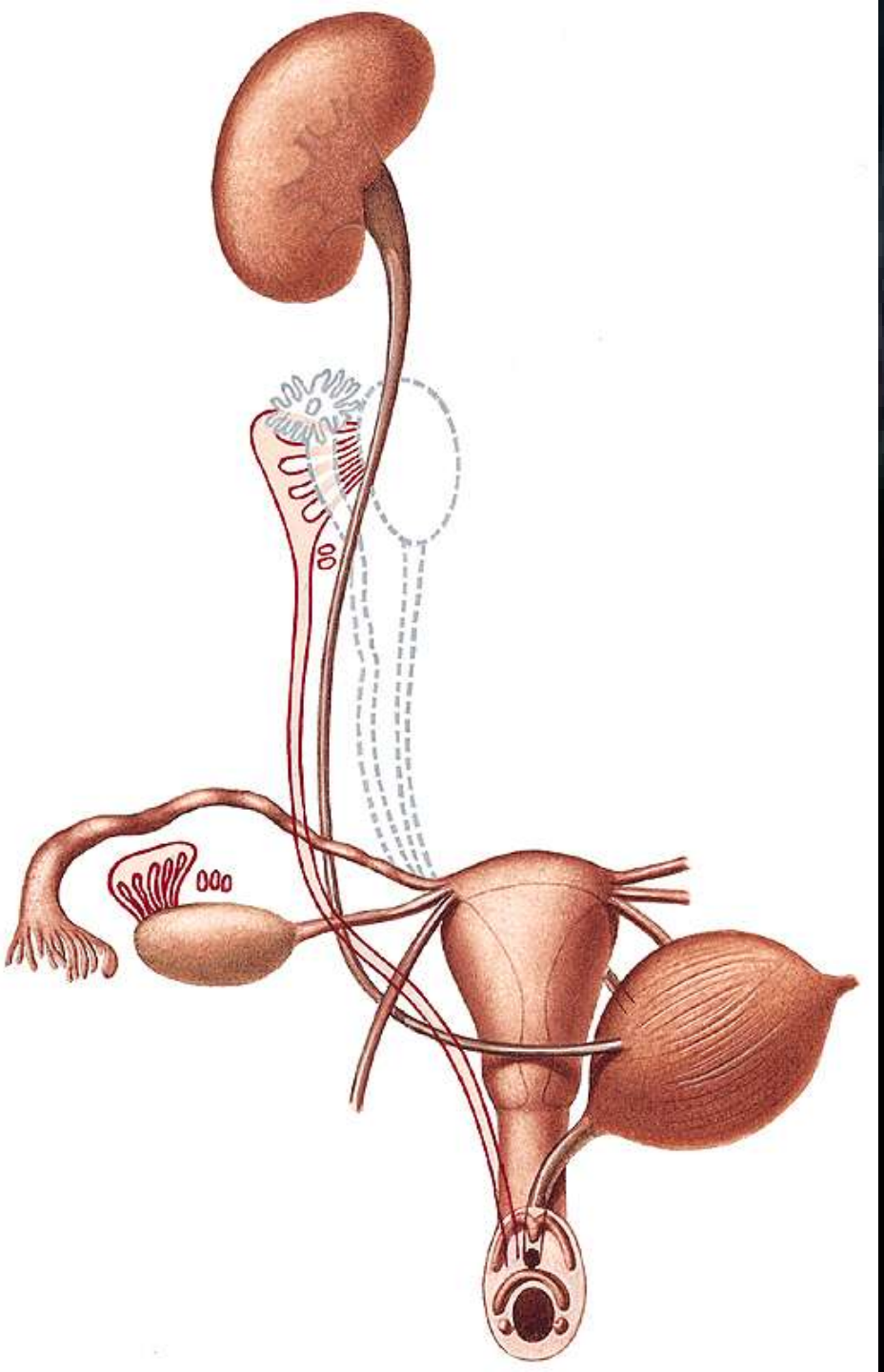


By the structure genitals divided in to parenchymal and tubular organs.




Glans clitoris
Corpus cavernosum
Crus clitoris
Urethral opening
Bulb of vestibule
Vaginal opening





FRS: external structures

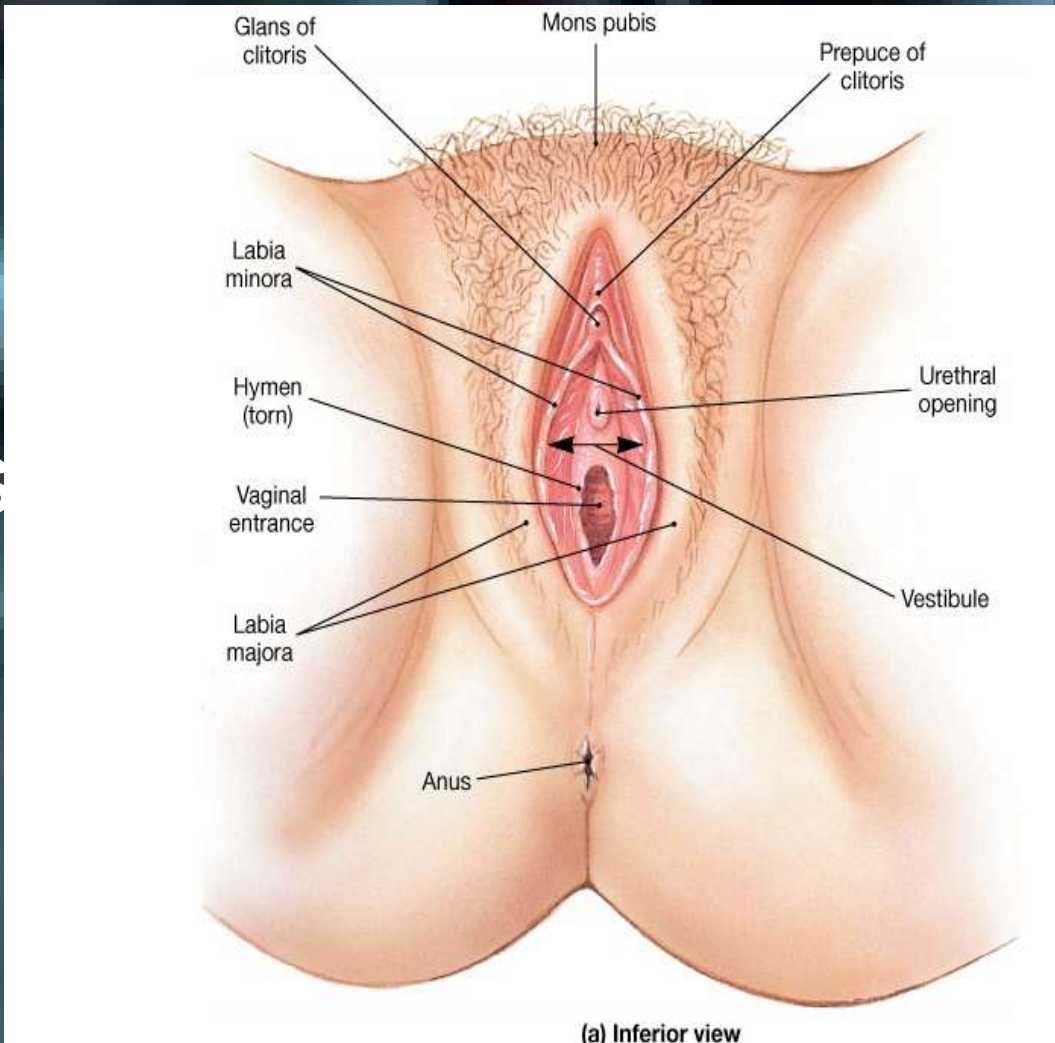
- Vulva:

Labia

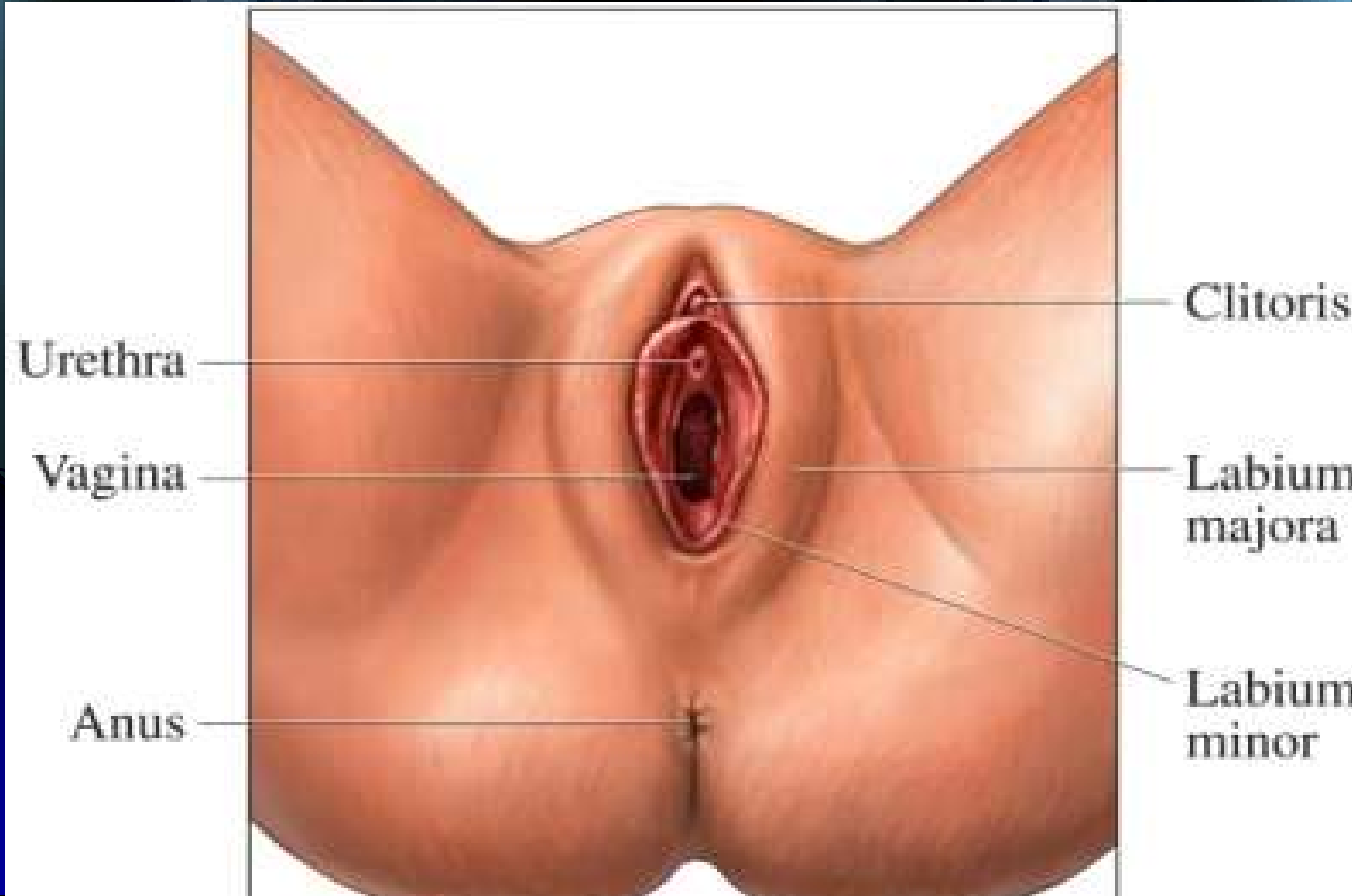
Bartholin glands

Clitoris

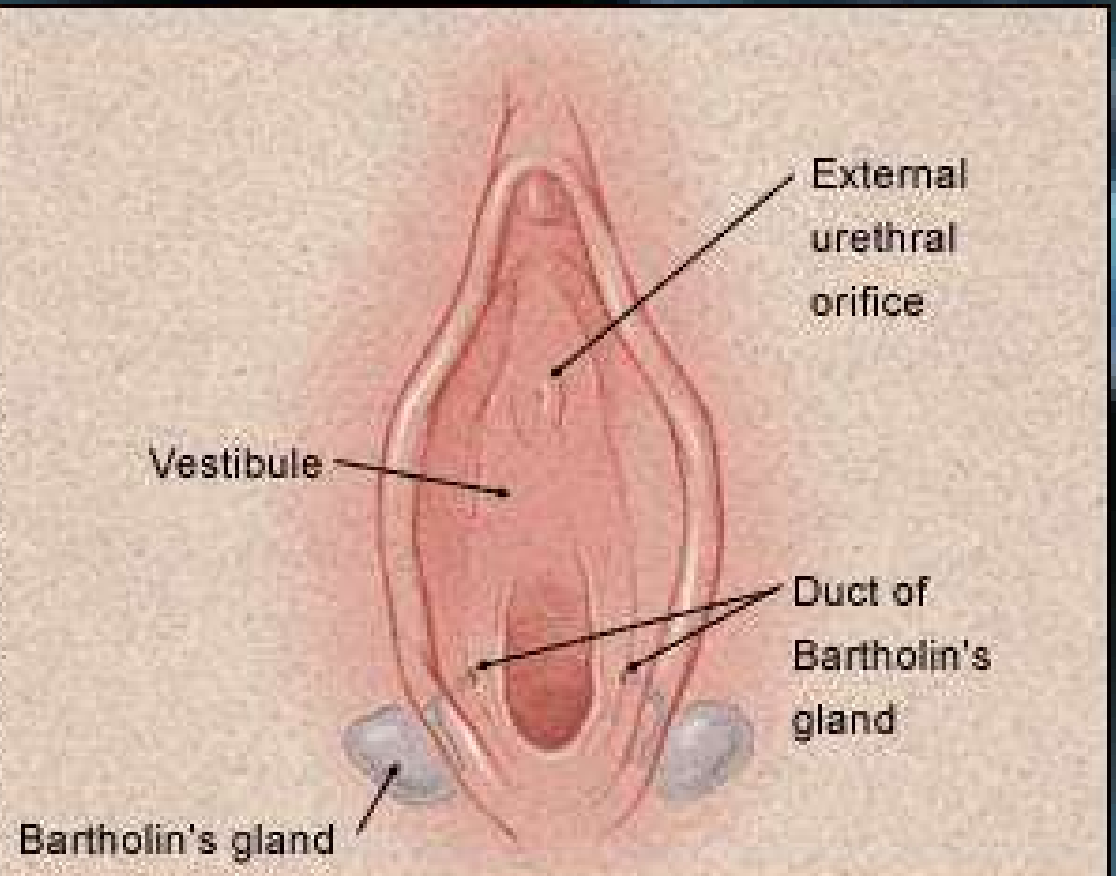
Perineum



Labia

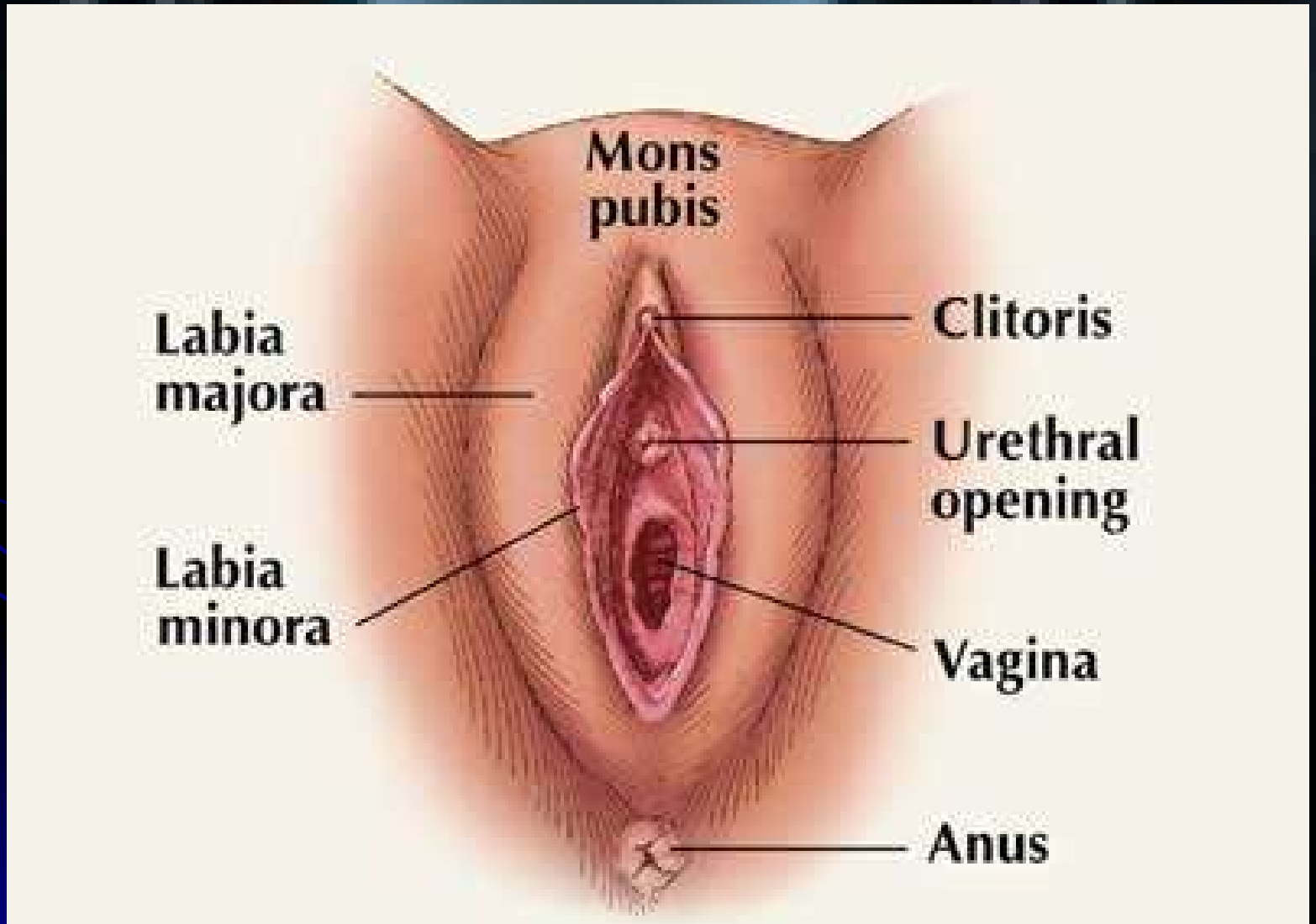


Bartholin glands

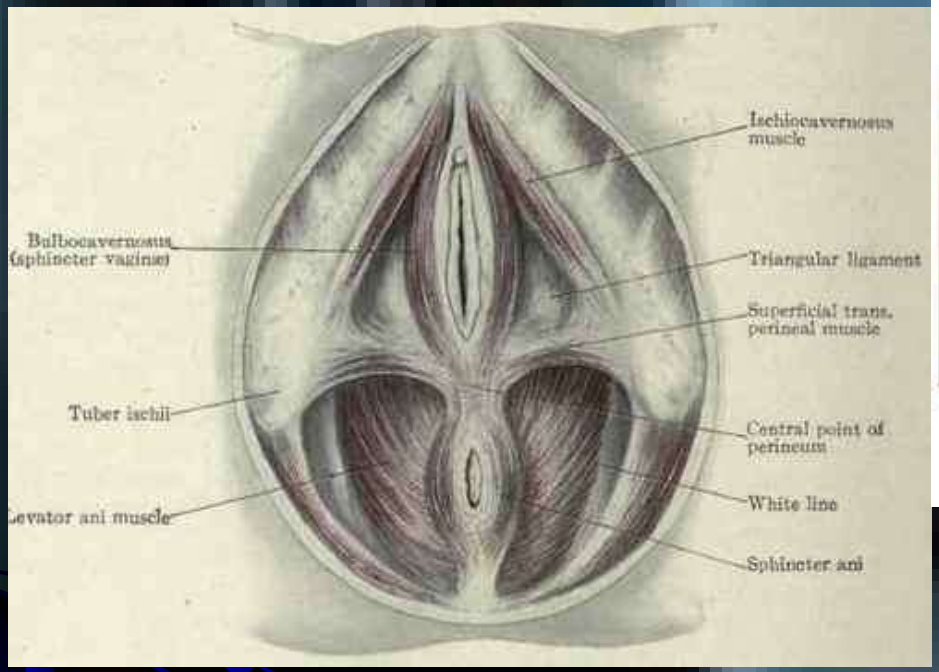


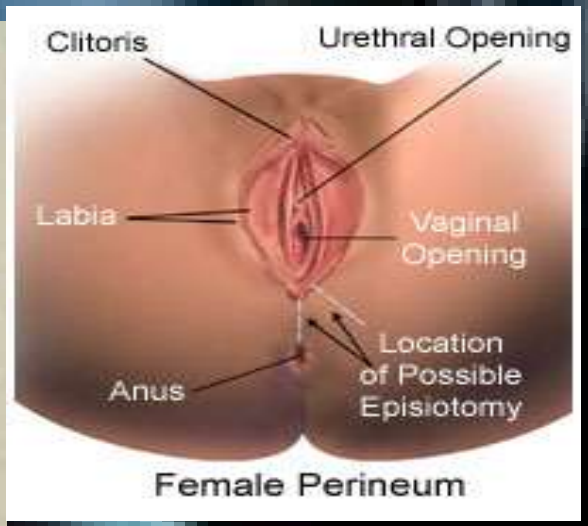
- The two **Bartholin's glands** lie next to the entrance to the vagina. They make a small amount of mucus-like fluid.

Clitoris

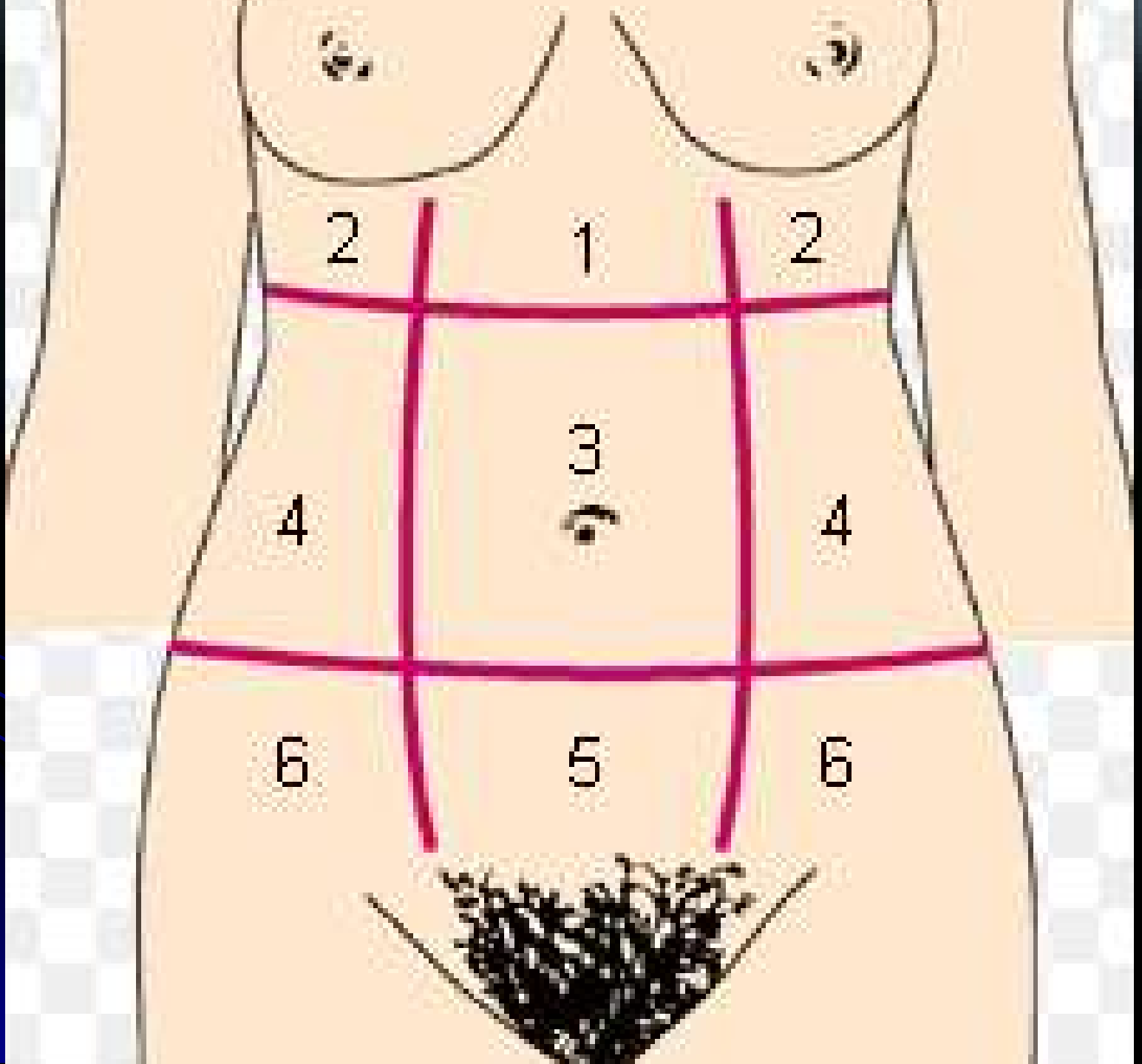

Mons pubis
Labia majora
Clitoris
Urethral opening
Labia minora
Vagina
Anus

Perineum

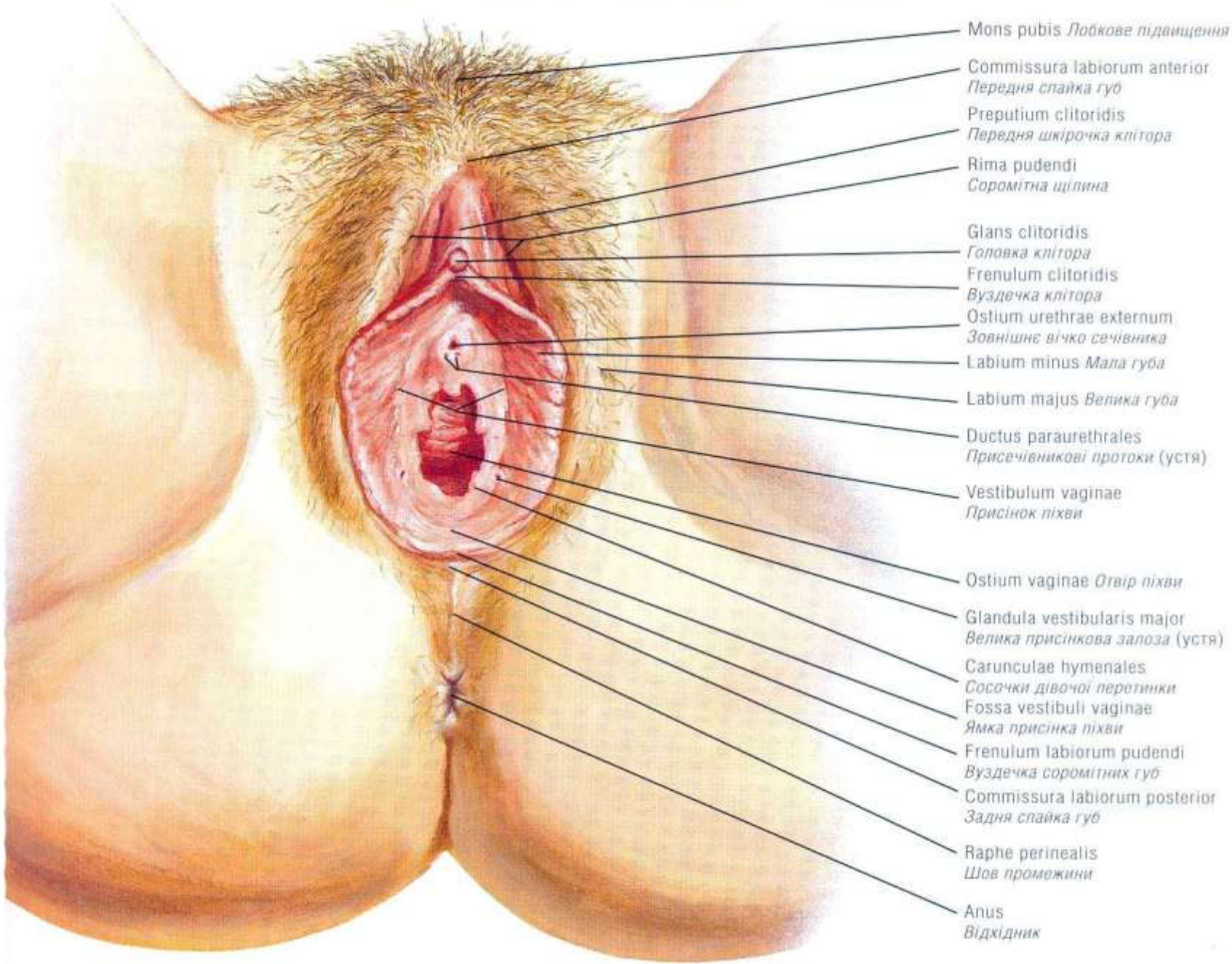

Ischiocavernosus muscle
Bulbocavernosus (sphincter vaginæ)
Triangular ligament
Superficial trans. perineal muscle
Tuber ischii
Central point of perineum
White line
Levator ani muscle
Sphincter ani

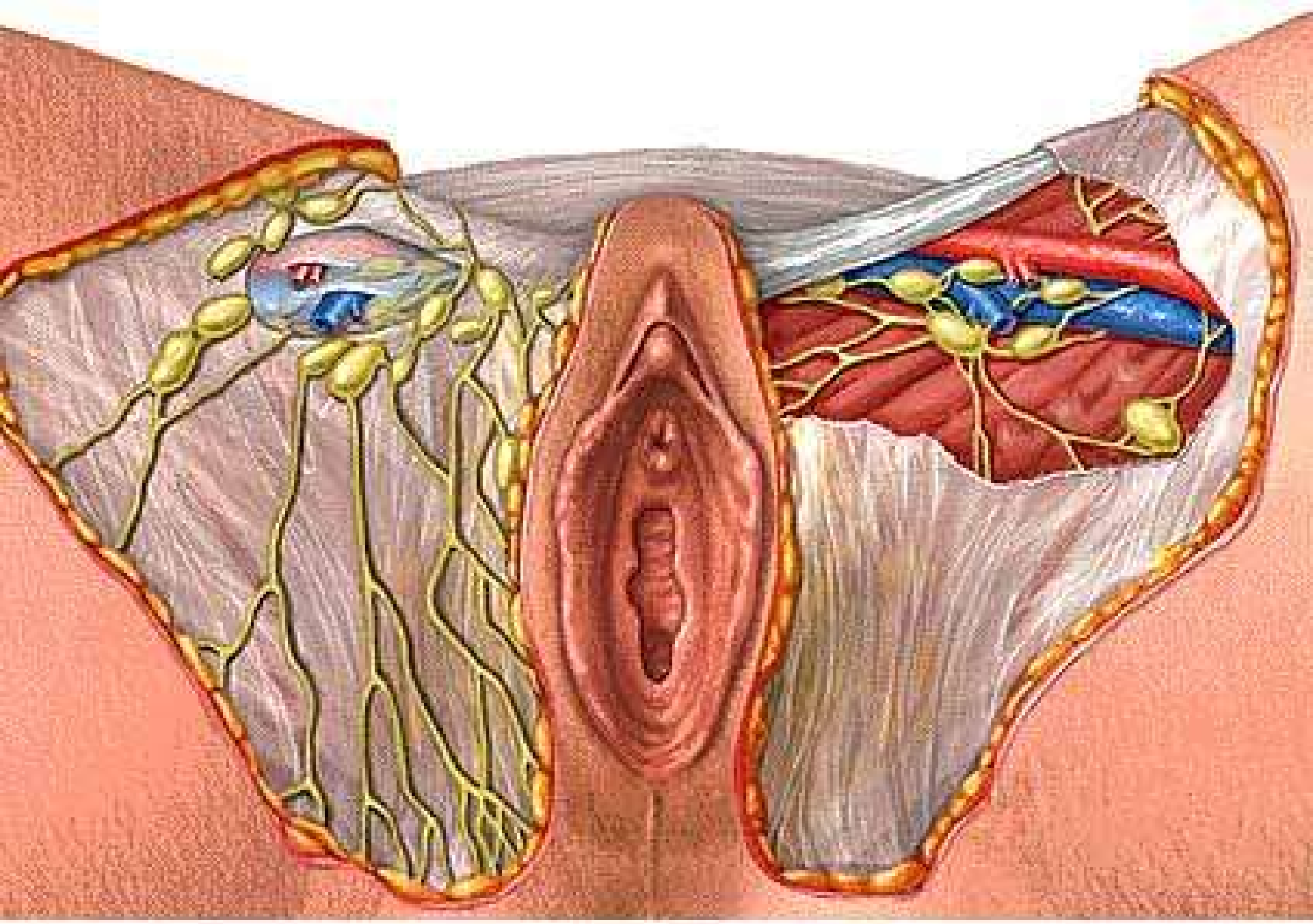

Clitoris
Urethral Opening
Labia
Vaginal Opening
Location of Possible Episiotomy
Anus
Female Perineum

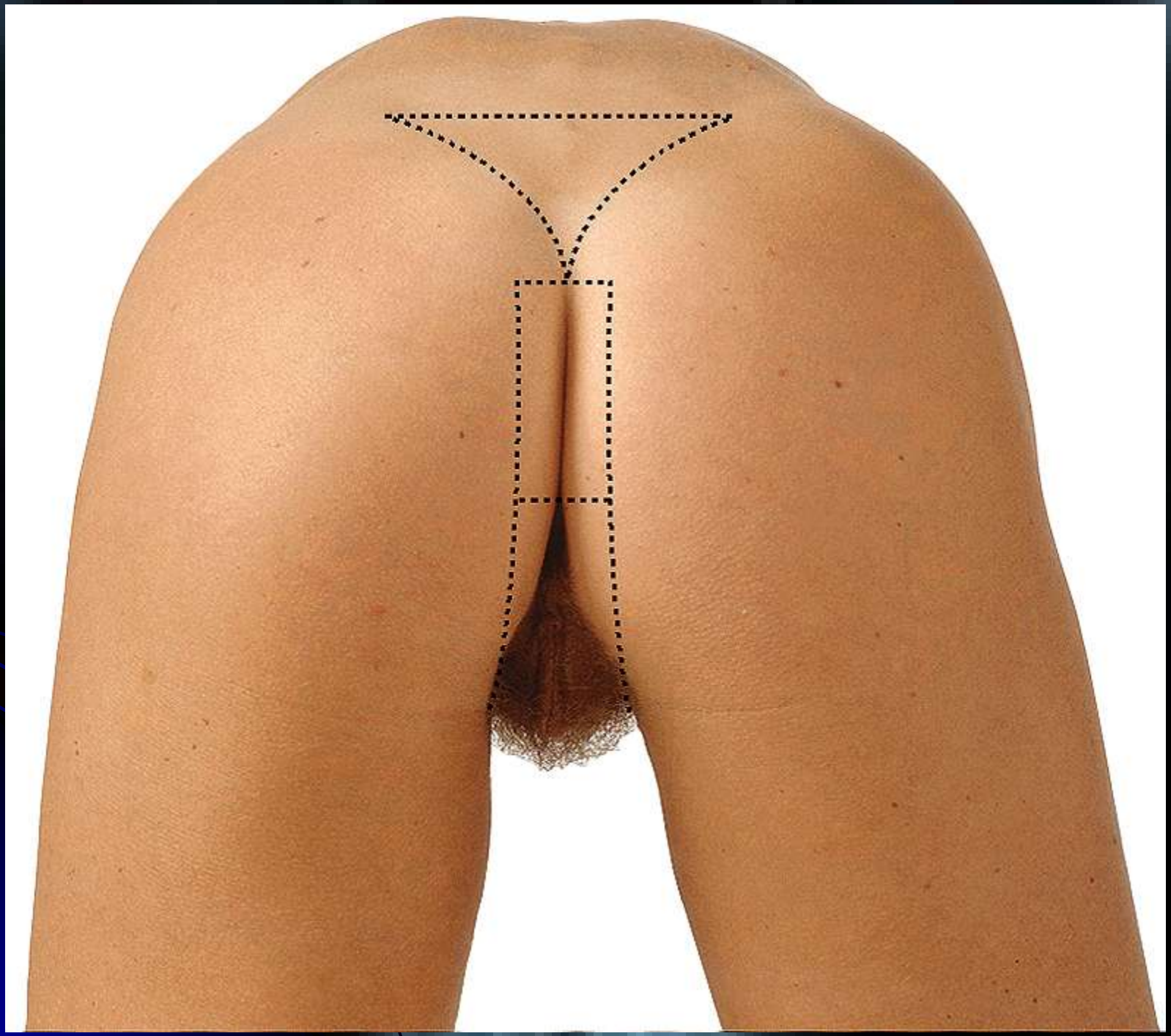

ca208010 comps.fotosearch.com


2
1
2
3
4
4
6
5
6

Промежина (perineum) і зовнішні жіночі статеві органи

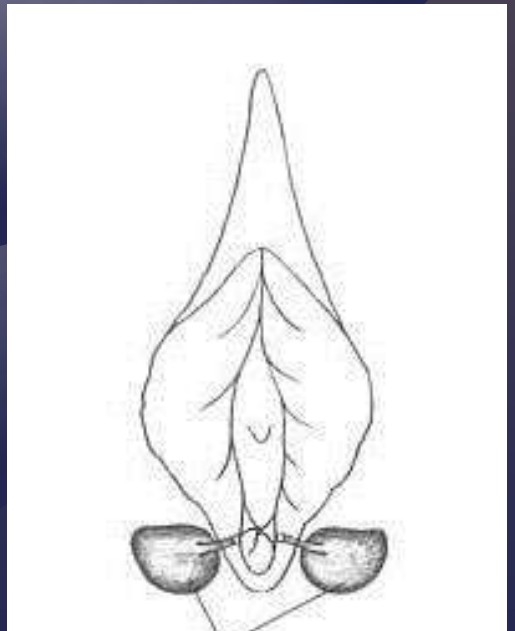






Vulvitis - an inflammation of the female genital areas; vulva.

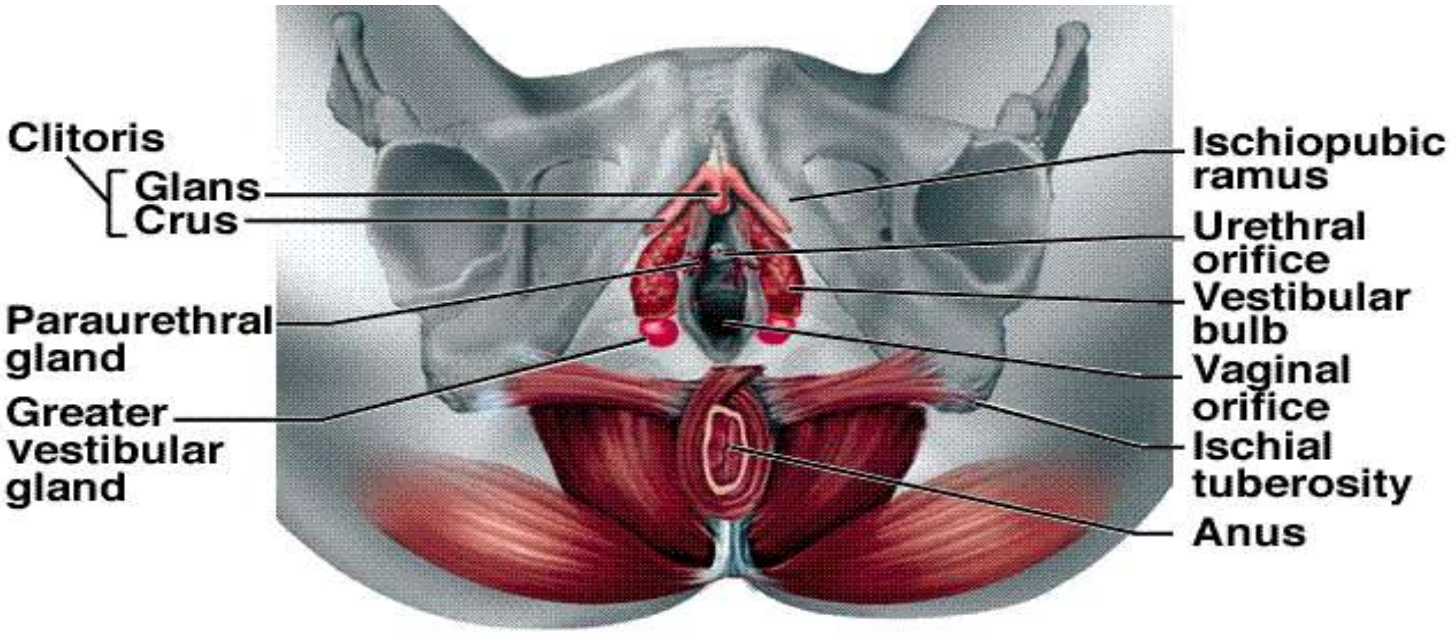
Bartolinitis - inflammation of the Bartholins glands and subcutaneous tissue that surrounds it.

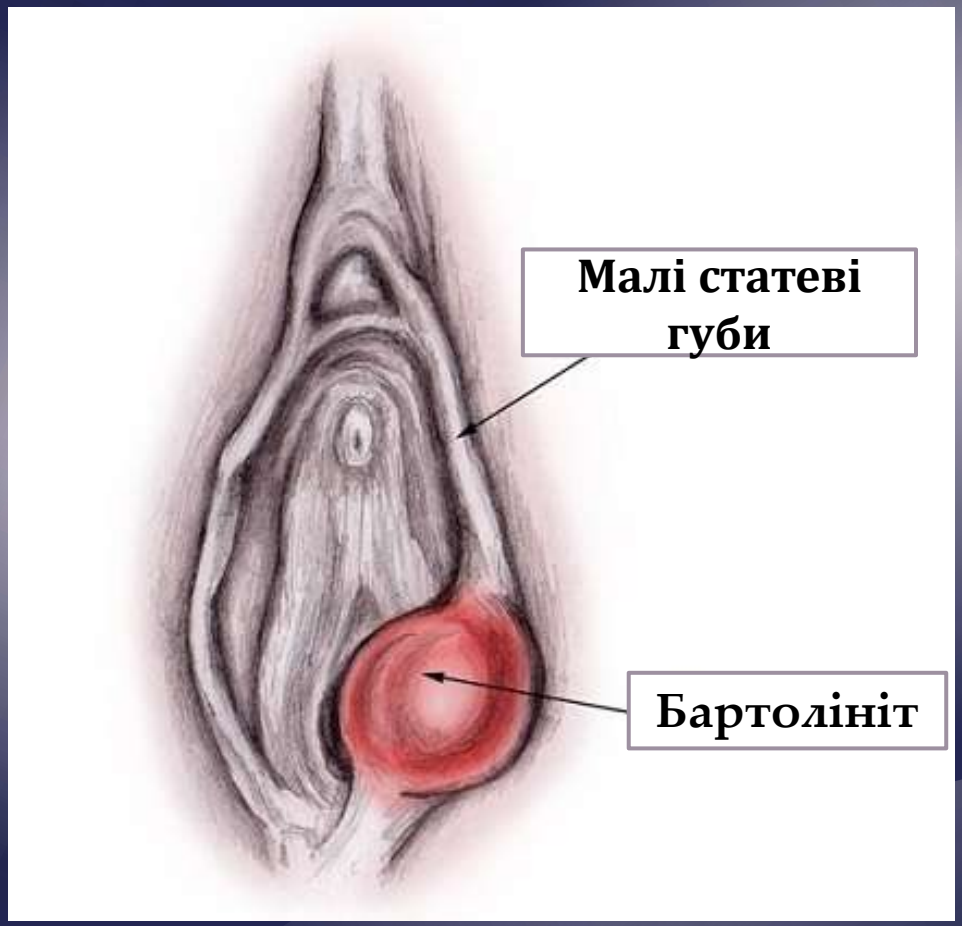


Accessary glands

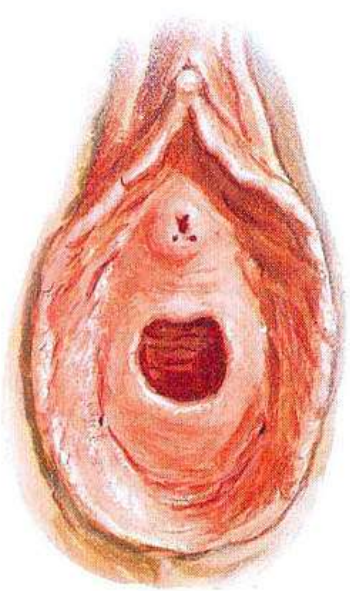
- opening into the vestibule or lower vagina.

- keep the vagina moist and provide most of the lubrication for intercourse.

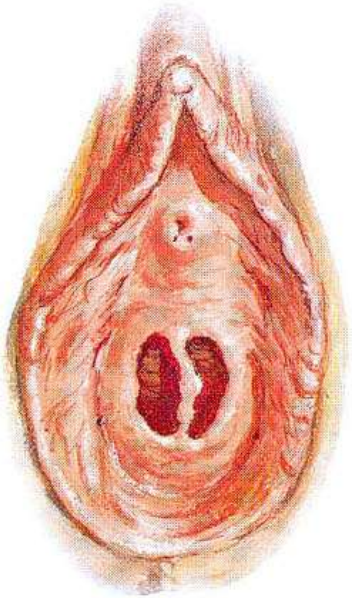



Малі статеві губи
Бартолініт

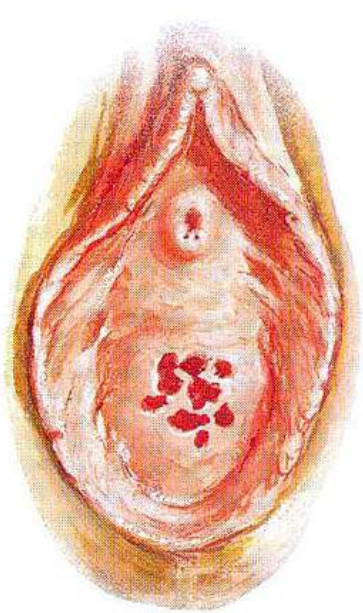
Vaginismus - nervous and mental disease accompanied by painful and uncontrollable muscle contraction of Pelvis.



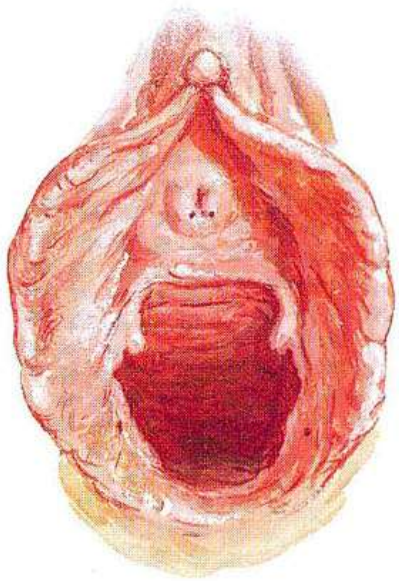
Hymen anularis
Кільцеподібна дівоча перетинка



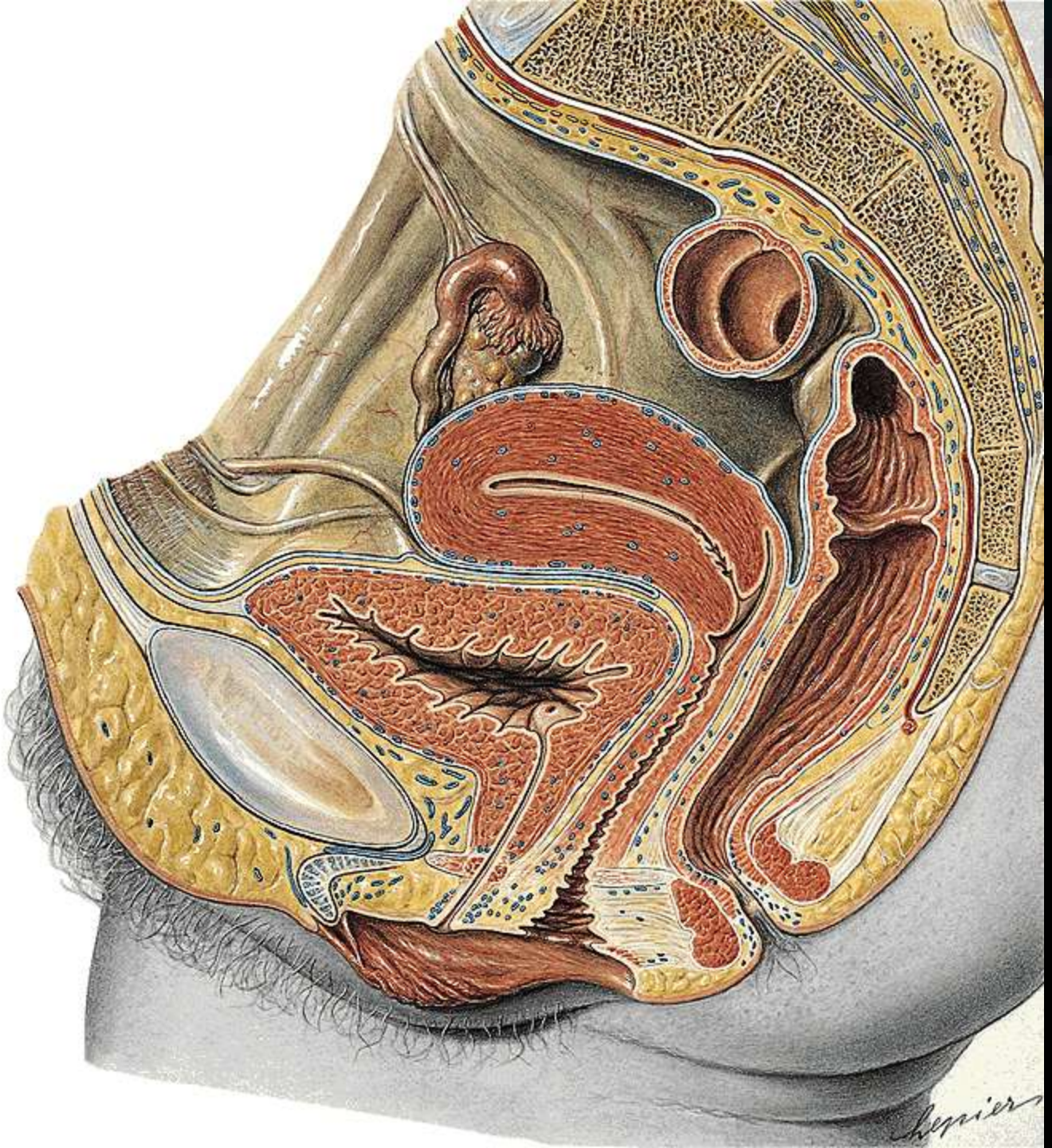
Hymen septus
Перегородчаста дівоча перетинка



Hymen cribriformis
Решітчаста дівоча перетинка

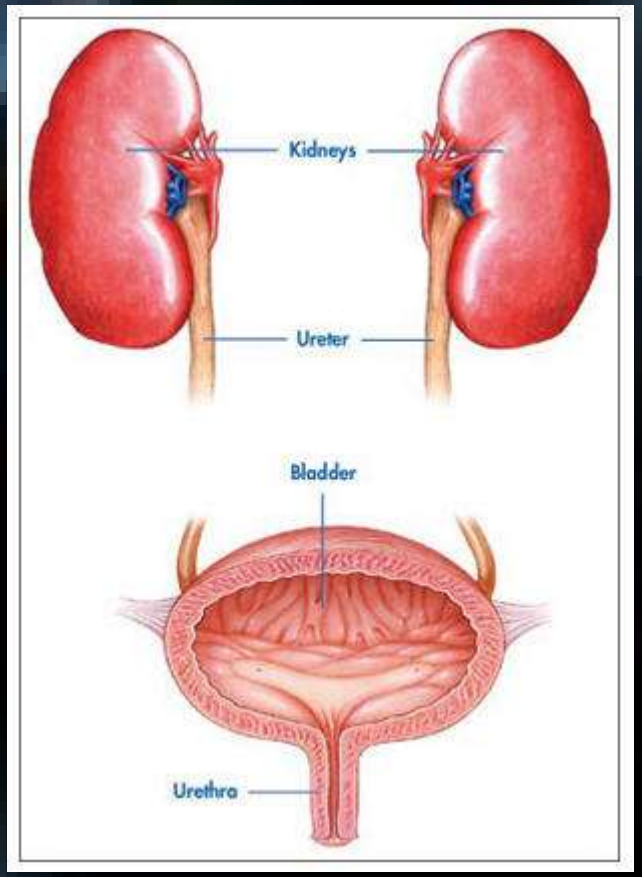


Отвір піхви, що народжувала

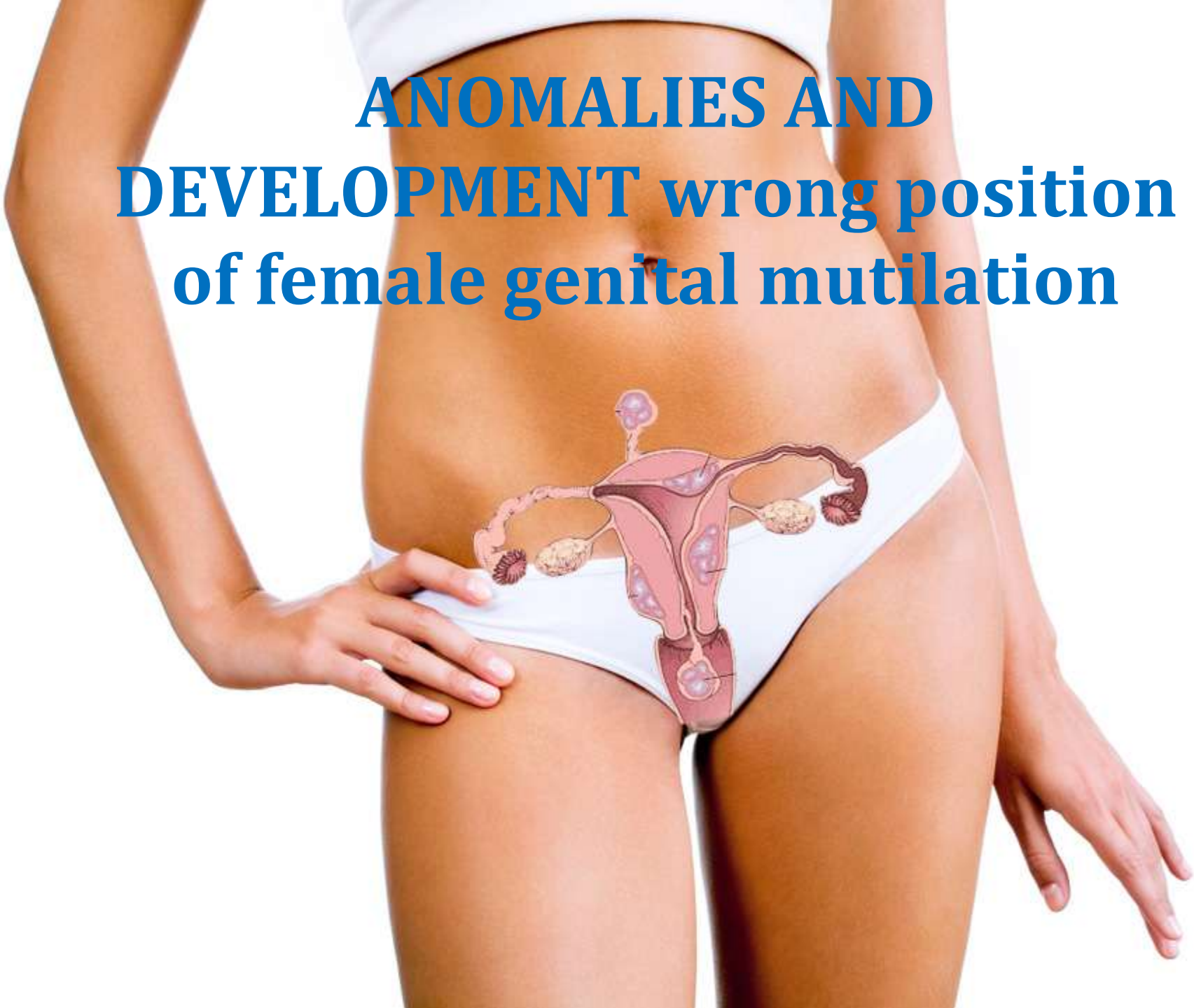


BLADDER AND URETHRA

A bladder is a pouch or other flexible enclosure with waterproof or gasproof walls. In the human female, the urethra is about 1-1.5 inches (2.5-4 cm) long and opens in the vulva between the clitoris and the vaginal opening.



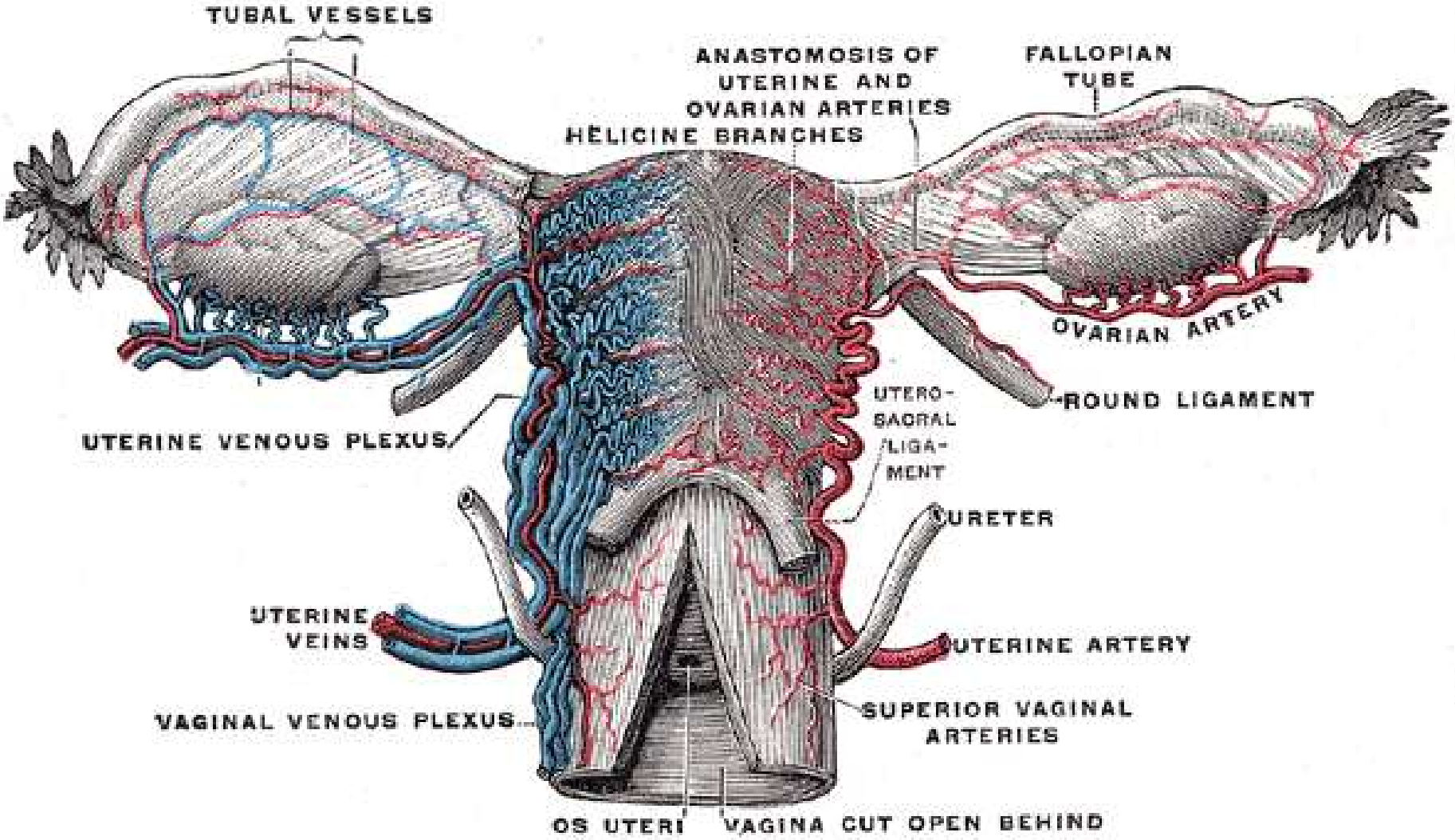
ANOMALIES AND DEVELOPMENT wrong position of female genital mutilation



CLASSIFICATION OF GENITAL ANOMALIES

The following classification provisions genital anomalies into account the clinical forms of displacement of the uterus, vagina and adjacent organs.

Anomalies of the uterus is considered to be its deviations beyond the physiological and disruption relationship between its separate parts, body and cervix.


TUBAL VESSELS
ANASTOMOSIS OF UTERINE AND OVARIAN ARTERIES
HELICINE BRANCHES
FALLOPIAN TUBE
OVARIAN ARTERY
ROUND LIGAMENT
UTERO-SACRAL LIGAMENT
URETER
UTERINE VENOUS PLEXUS
UTERINE VEINS
UTERINE ARTERY
VAGINAL VENOUS PLEXUS
SUPERIOR VAGINAL ARTERIES
OS UTERI
VAGINA CUT OPEN BEHIND

I. Uterine displacement on the vertical axis (up and down)

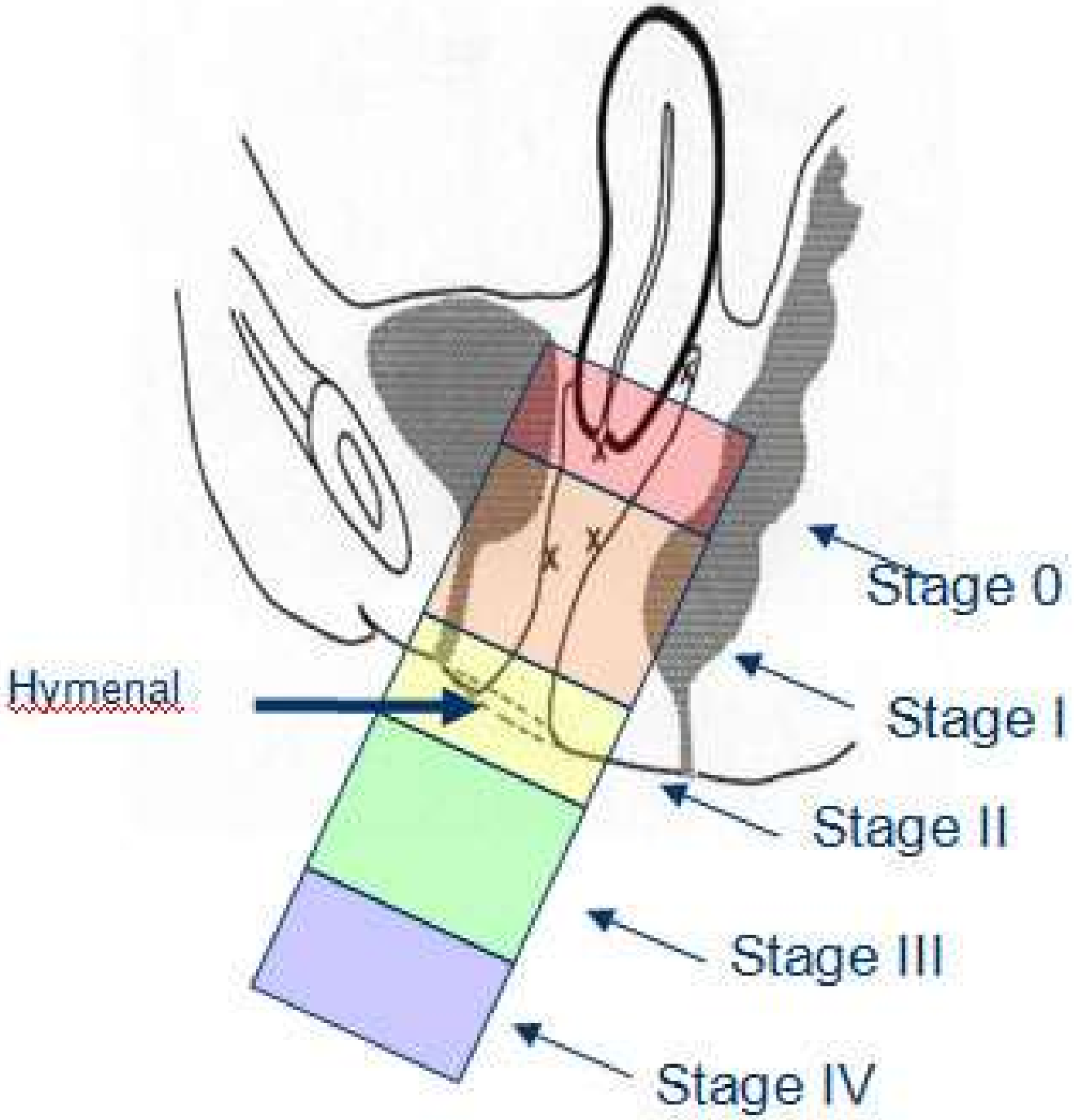
I. Uterine displacement on the vertical axis (up and down)

1. Raising UTERUS (ELEVATIO UTERI).

The uterus is displaced upwards, its bottom is placed above the plane of the entrance to the pelvis, vaginal portion of the cervix - above the spinal line; during vaginal examination the uterus was difficult to be achieved.

I. Uterine displacement on the vertical axis (up and down)

2. Omission UTERUS (DESCENSUS UTERI). The uterus is below normal levels, vaginal portion of the cervix (external eye) - lower spinal line, but with no gender gap appears even when natuzhuvanni.


Stage 0
Hymenal
Stage I
Stage II
Stage III
Stage IV

Опущение матки 1 степени

Опущение матки 2 степени

Опущение матки 3 степени

Опущение матки 4 степени

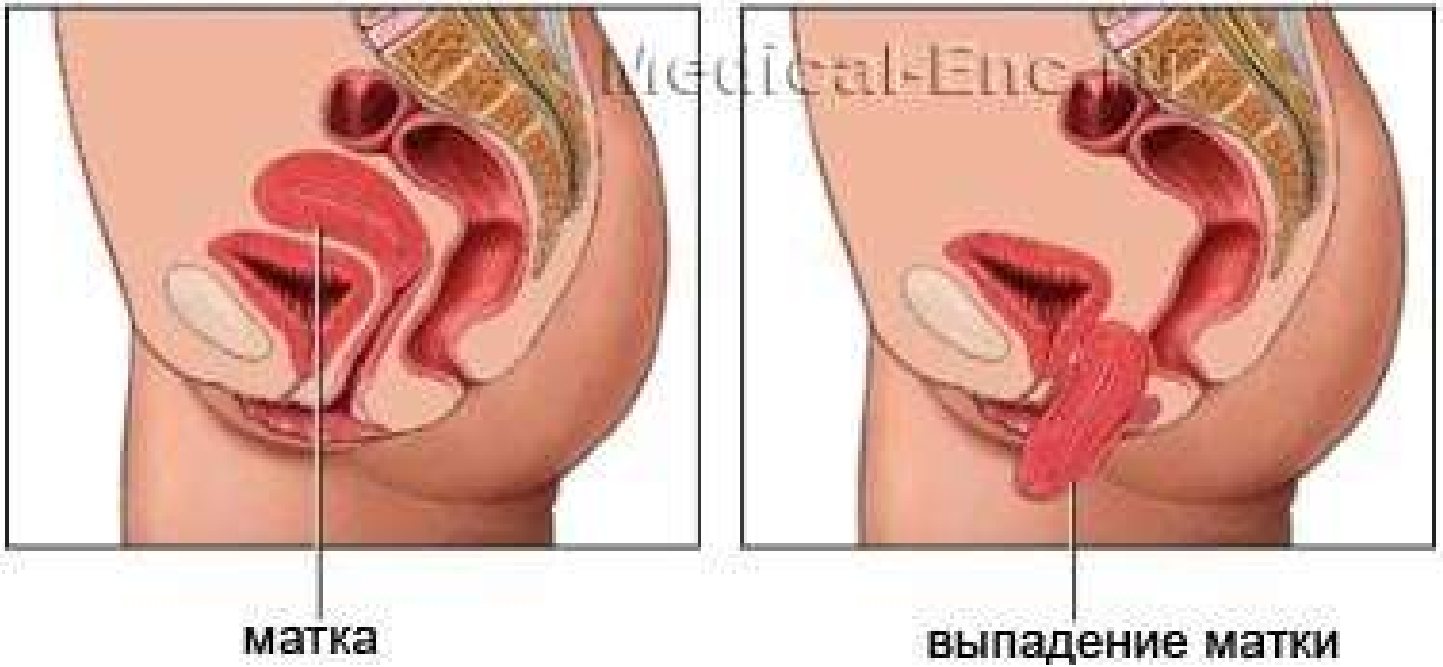
I. Uterine displacement on the vertical axis (up and down)

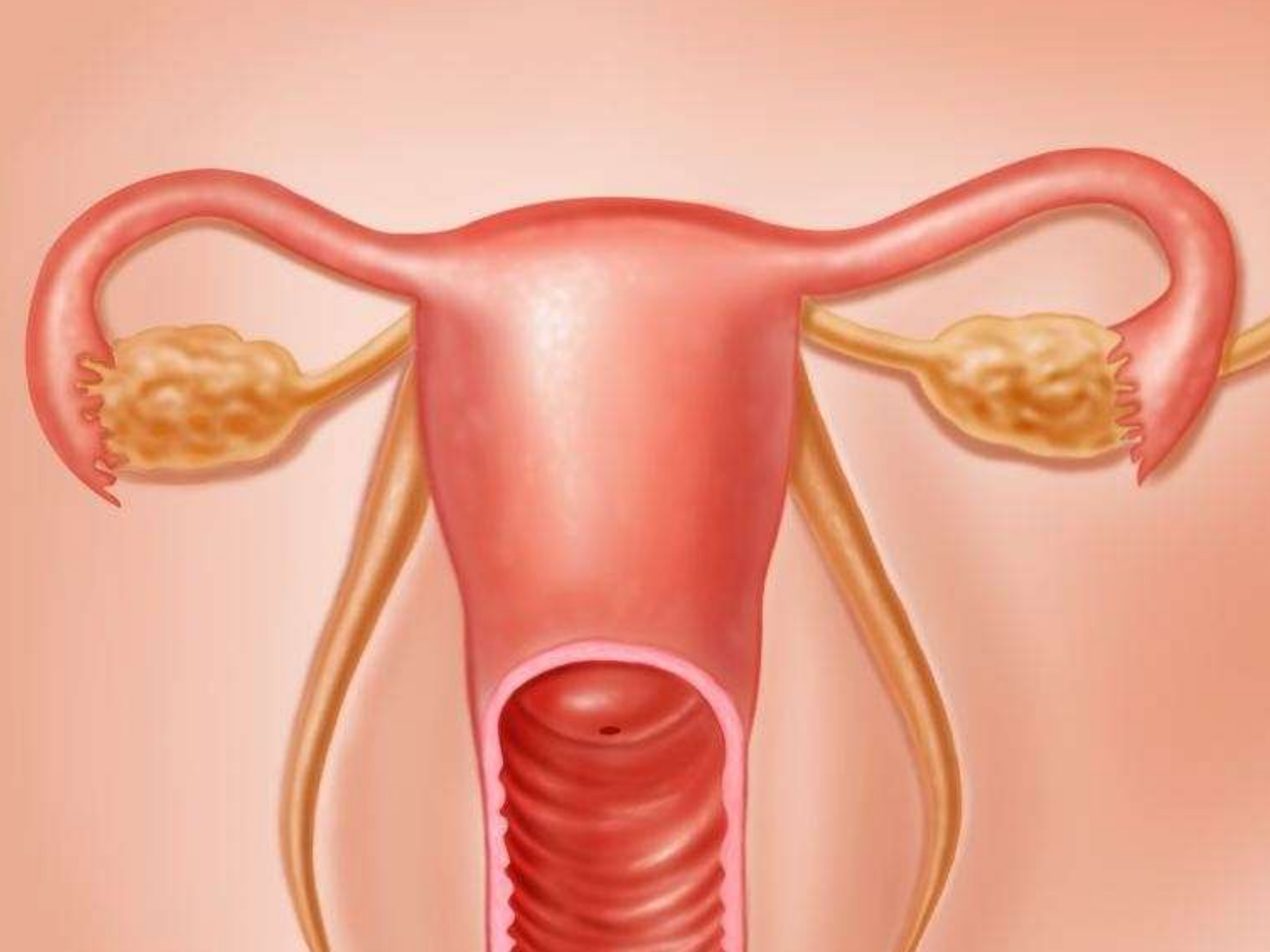
3. UTERINE loss (PROLAPSUS UTERI). The uterus is shifted down, partially or completely beyond the genital slit. There are full and partial loss of the uterus.

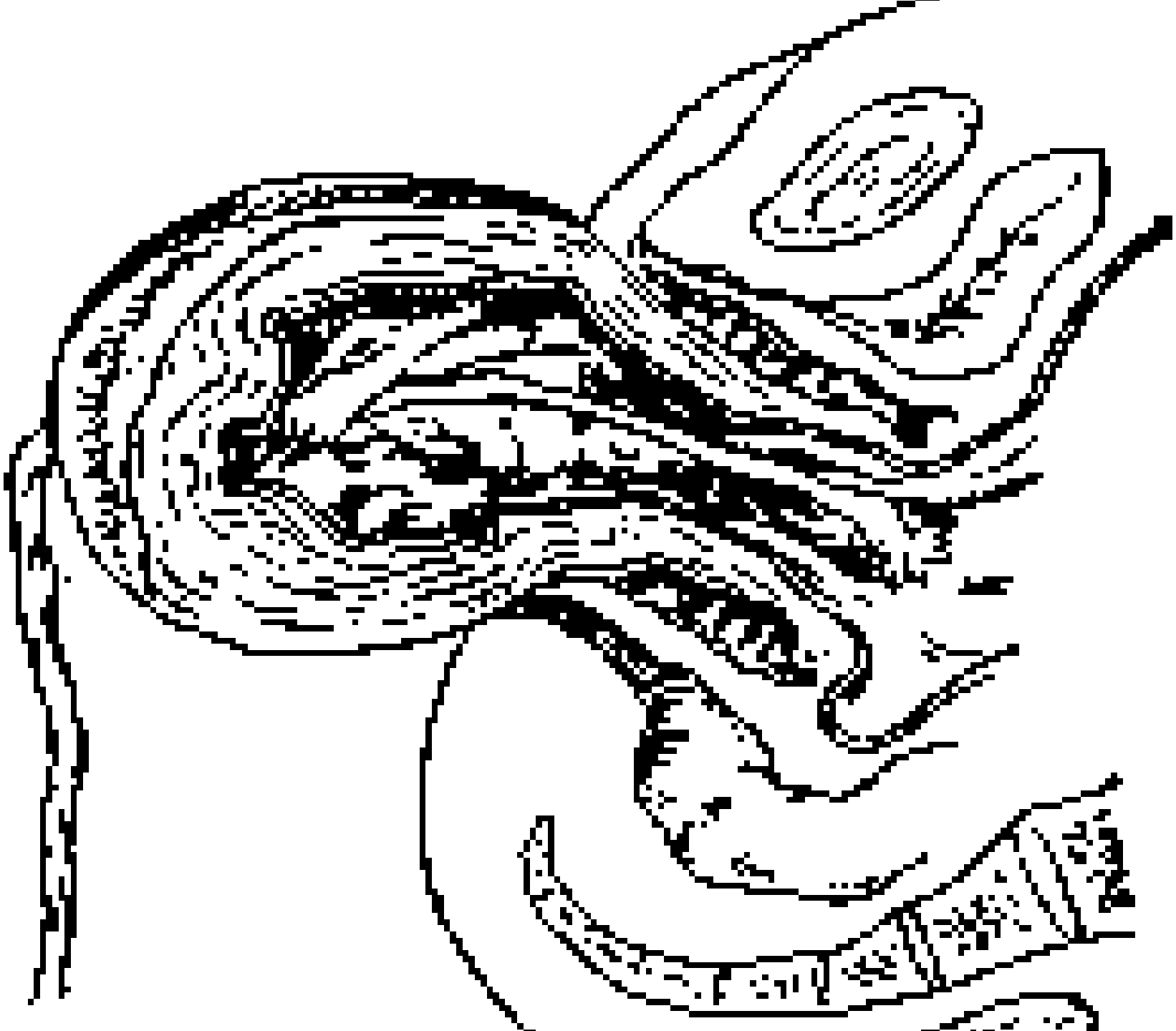
Incomplete loss UTERUS

of the gender gap. So only the vaginal portion of the cervix, uterine body is placed outside the gender gap, sometimes there may be a lengthening of the cervix (elongatio colli uteri).

- **Complete uterine prolapse - neck and body of the uterus located below the gender gap that is usually accompanied by a loss of the vagina. This extension of the cervix is not found, the correlation between the body of the uterus and cervix saved.**







II. Uterine displacement on the horizontal axis

Uterine displacement on the horizontal axis.

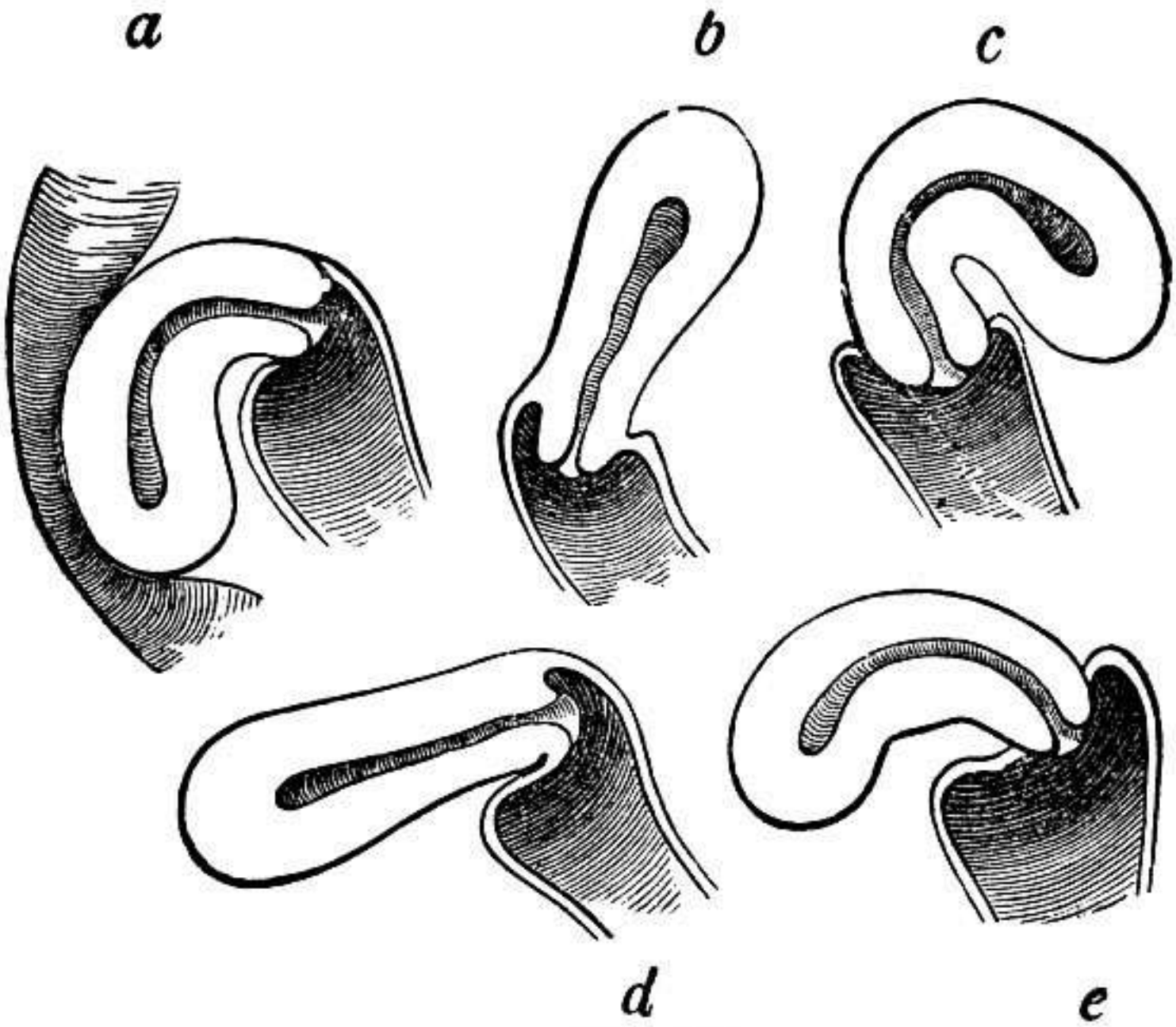
4 types of displacement of the entire uterus (body and neck) with regard to leading axis pelvis (positio uteri):

1. Antepositio - the whole uterus is displaced anteriorly.

2. Retropositio - uterus is displaced posteriorly.

3. Dextropositio - uterus is displaced to the right.

4. Sinistropositio - uterus is shifted to the left.


a
b
c
d
e

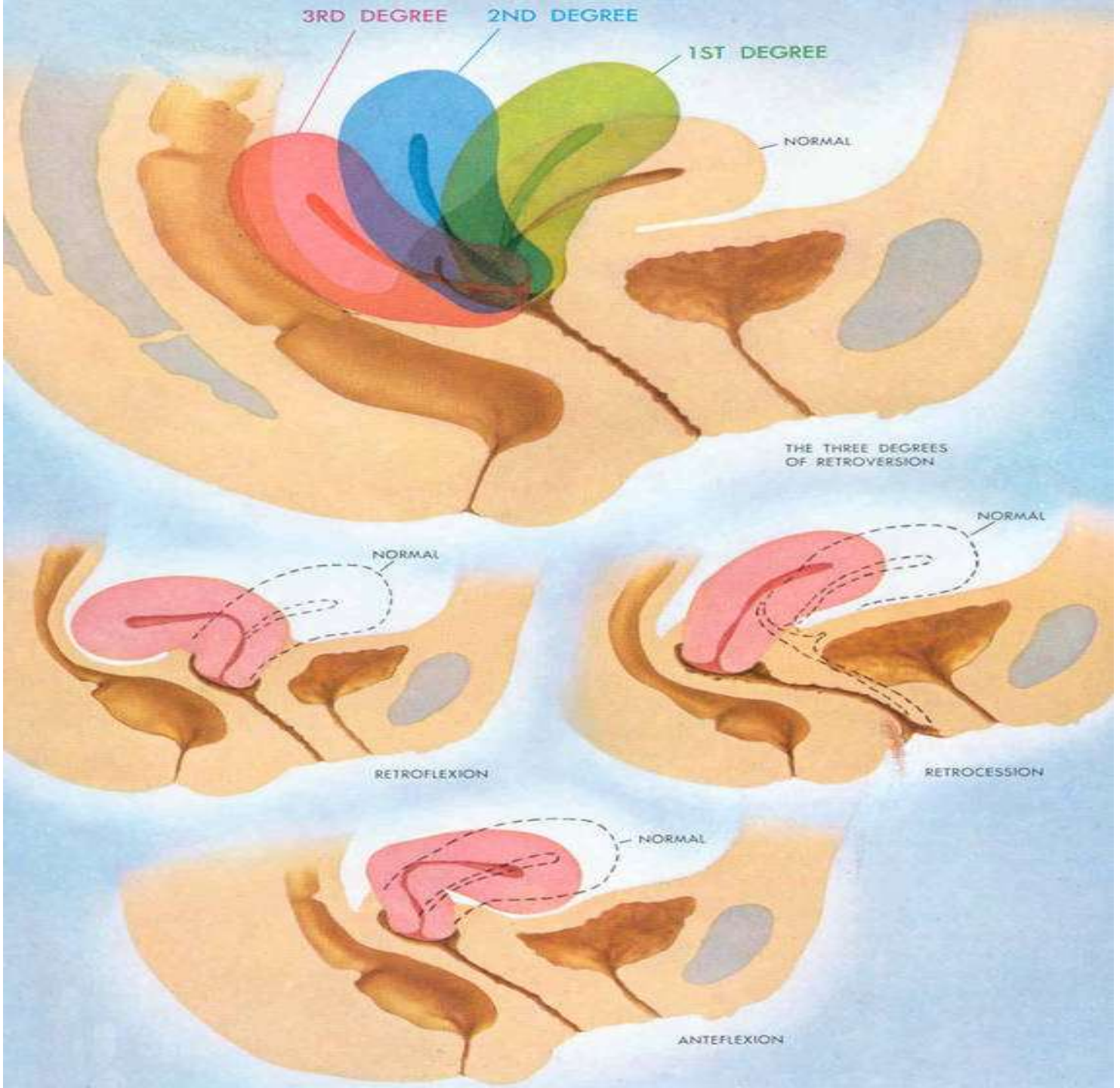
III. The slope of the UTERUS (VERSIO UTERI)

III. The slope of the UTERUS (VERSIO UTERI)

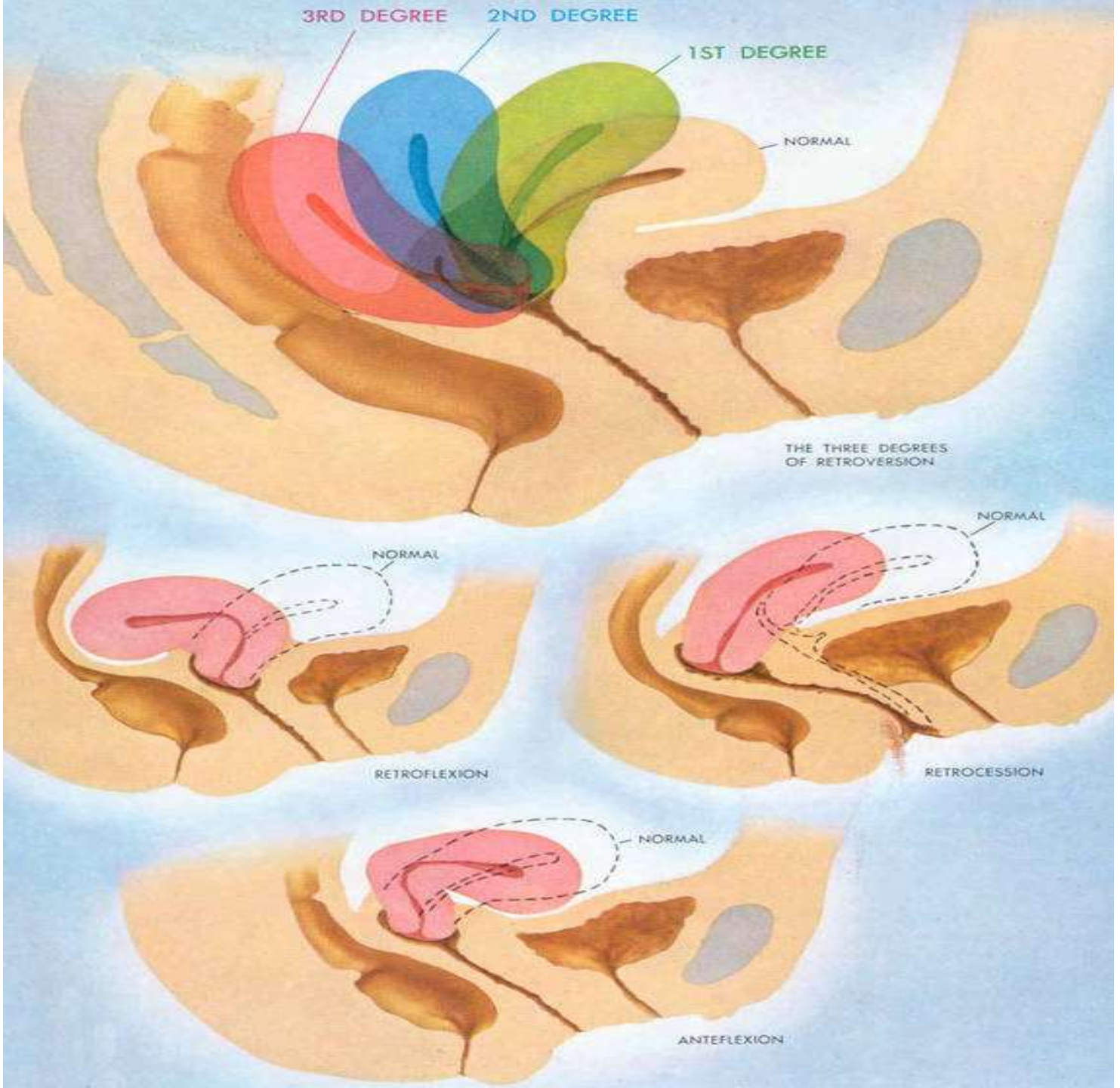
The body of the uterus is displaced to one side, the cervix - the opposite. _ At physiological anteversio uterine body refused to front and top to bottom, the cervix - backwards and downwards in the vertical position of the woman placed the body of the uterus above the cervix.

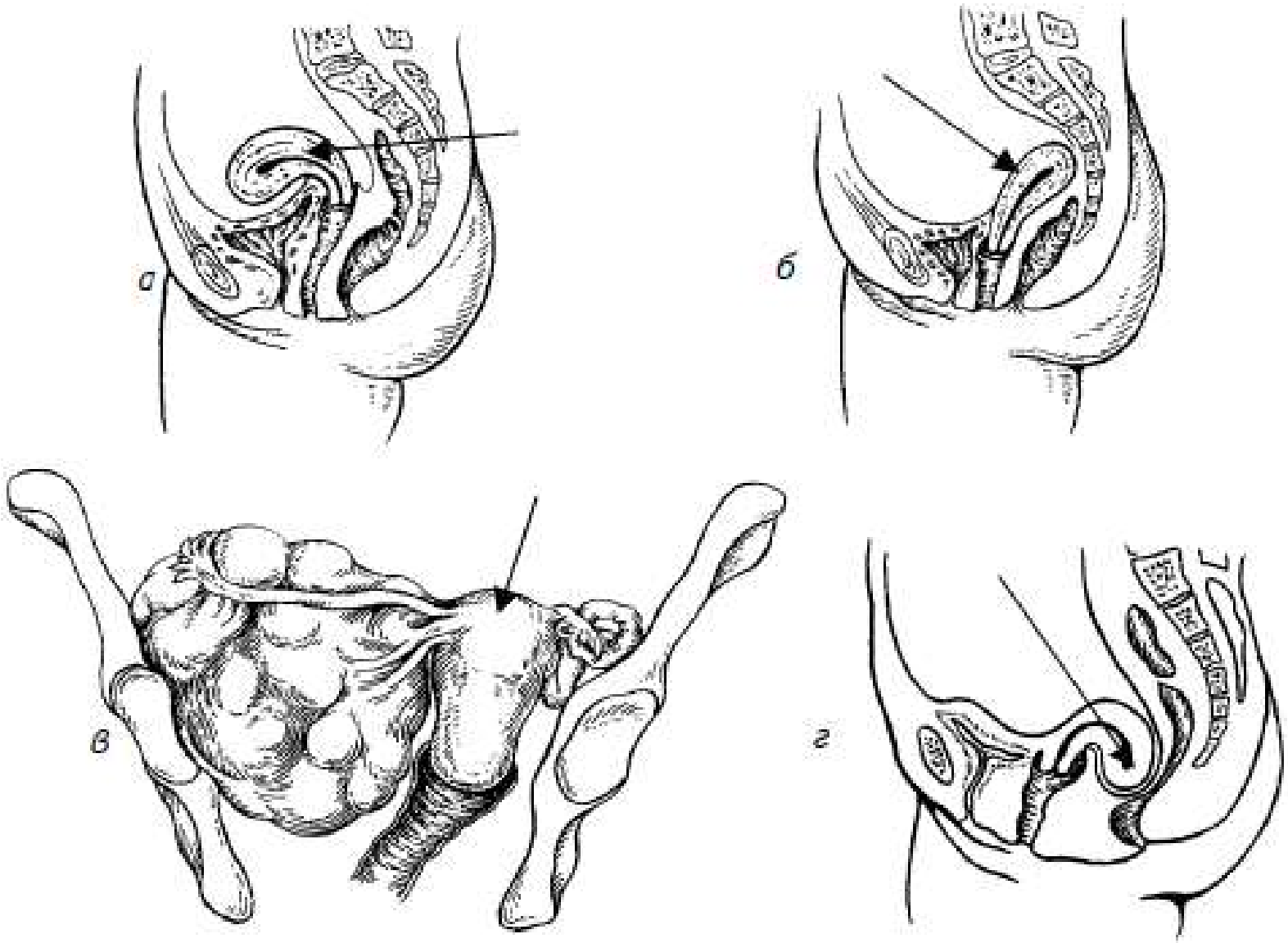
III. The slope of the UTERUS (VERSIO UTERI)

The pathological inclination of the uterus:_ a) anteversio be pathological if it remains stationary, and expressed so much that the body of the uterus is directed anteriorly and downward, and neck - backwards and upwards. _ b) dextroversio - uterine body is directed to the right and upwards, neck - right and down. _ a) sinistroversio - uterine body is directed to the left and up, neck - left and down


3RD DEGREE
2ND DEGREE
1ST DEGREE
NORMAL
THE THREE DEGREES
OF RETROVERSION
NORMAL
RETROFLEXION
NORMAL
RETROCESSION
NORMAL
ANTEFLEXION

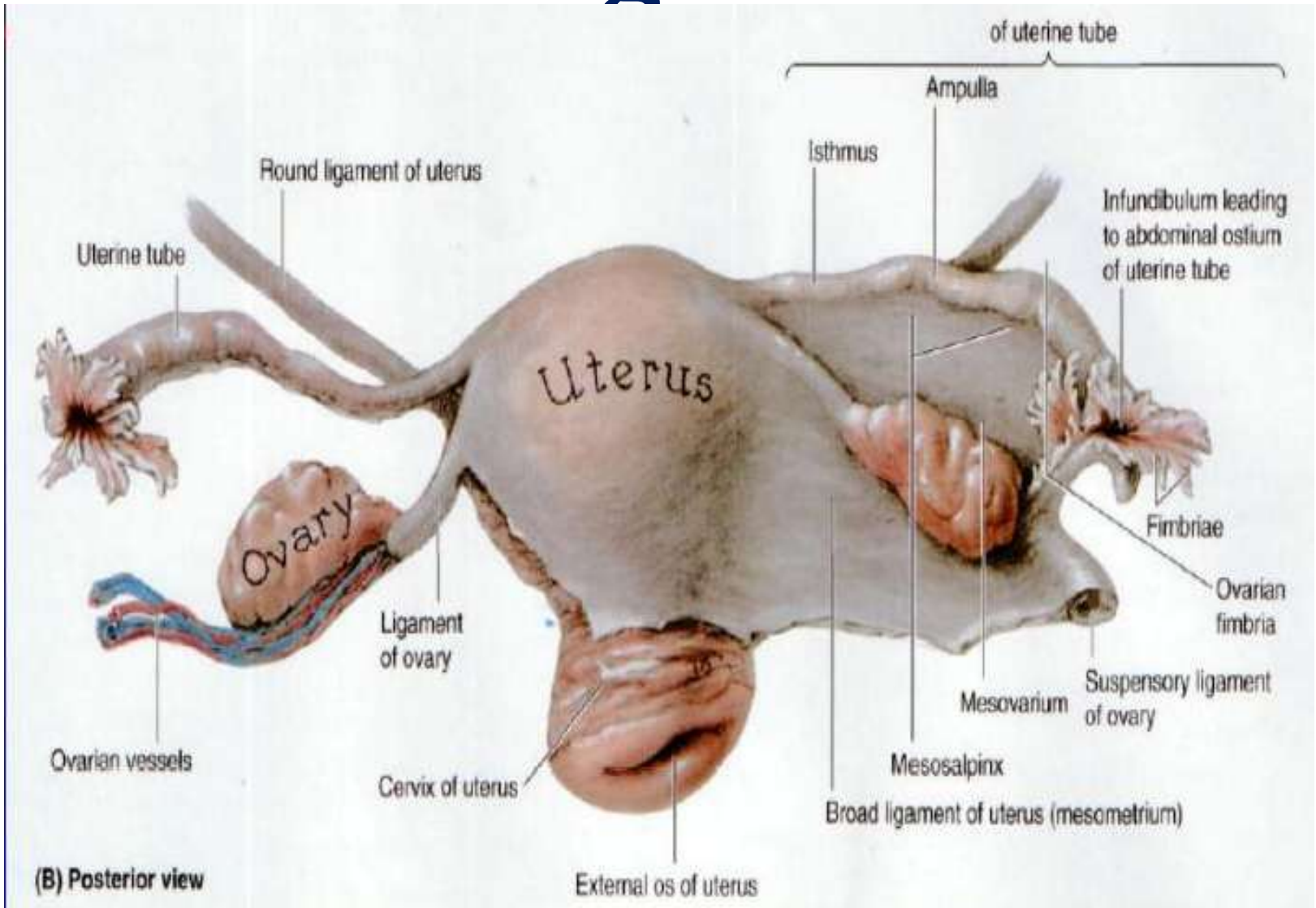
IV. UTERINE bend


3RD DEGREE
2ND DEGREE
1ST DEGREE
NORMAL
THE THREE DEGREES
OF RETROVERSION
NORMAL
RETROFLEXION
NORMAL
RETROCESSION
NORMAL
ANTEFLEXION

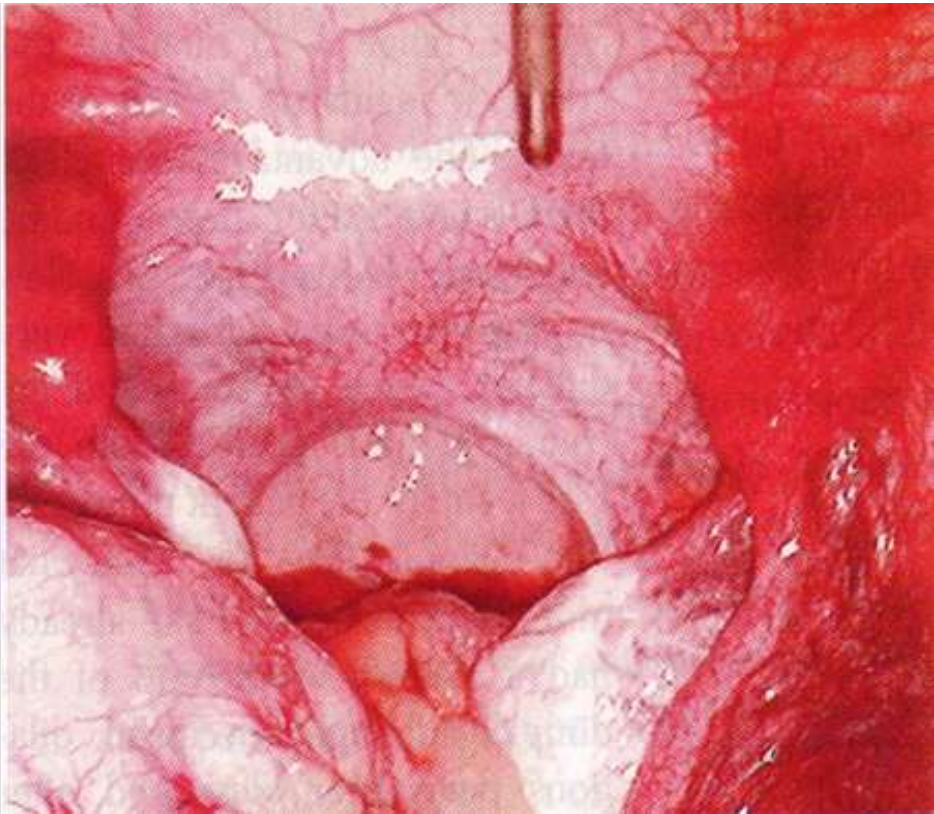


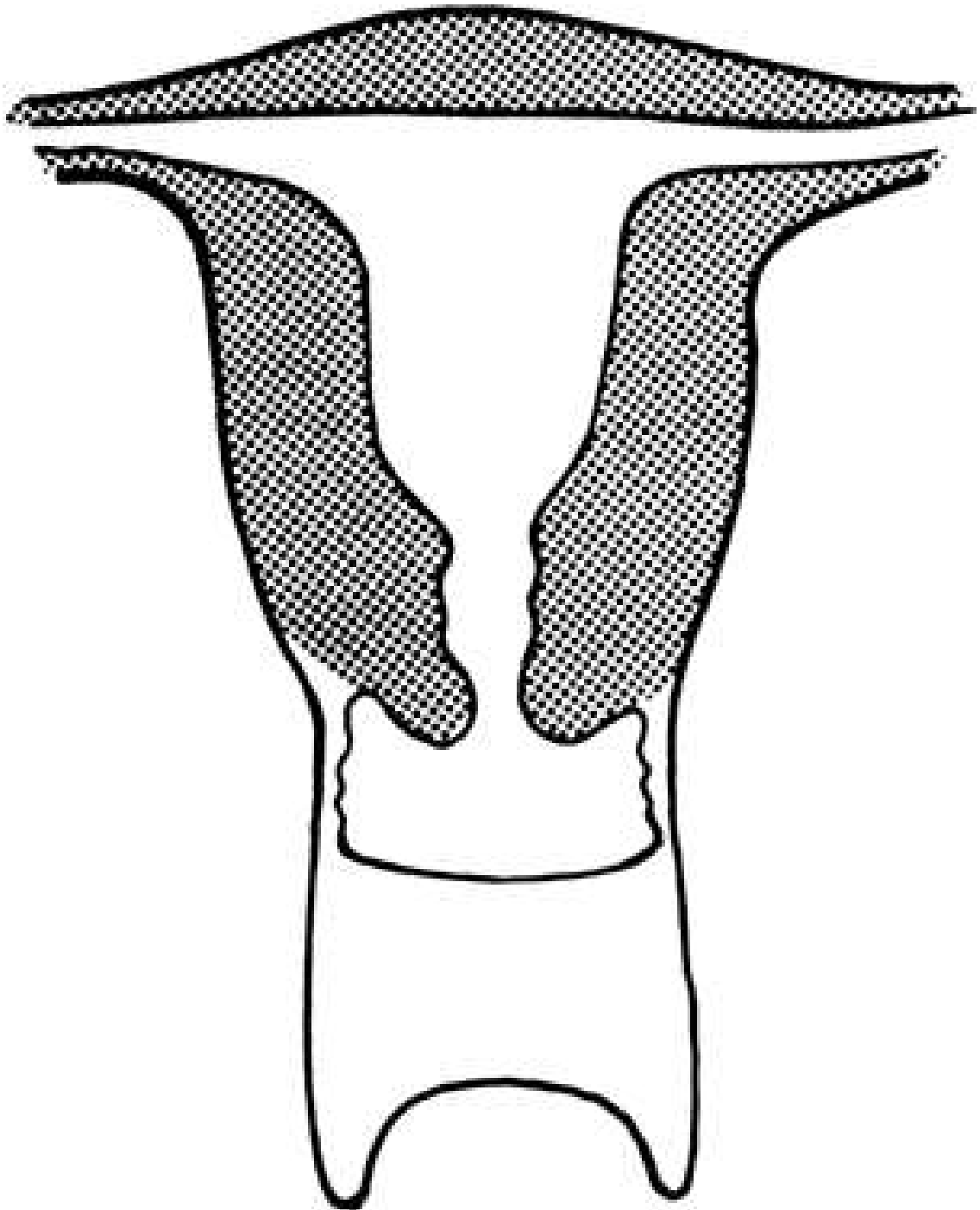
а - зміщення матки доперед; б - зміщення матки назад; в - зсув вліво (у зв'язку з розвитком пухлини яєчників); г - загин матки

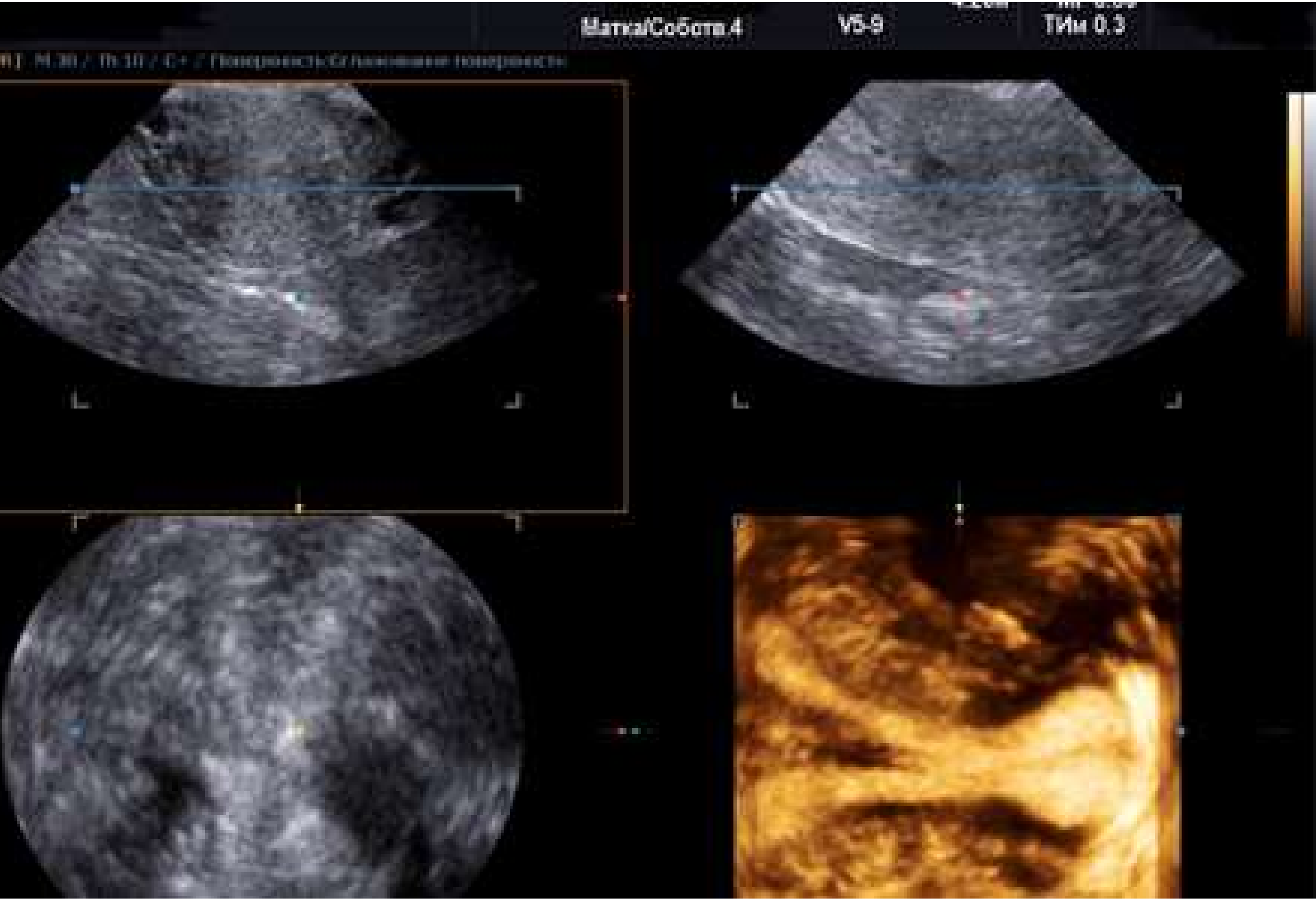
ANOMALIES OF uterus and vagina



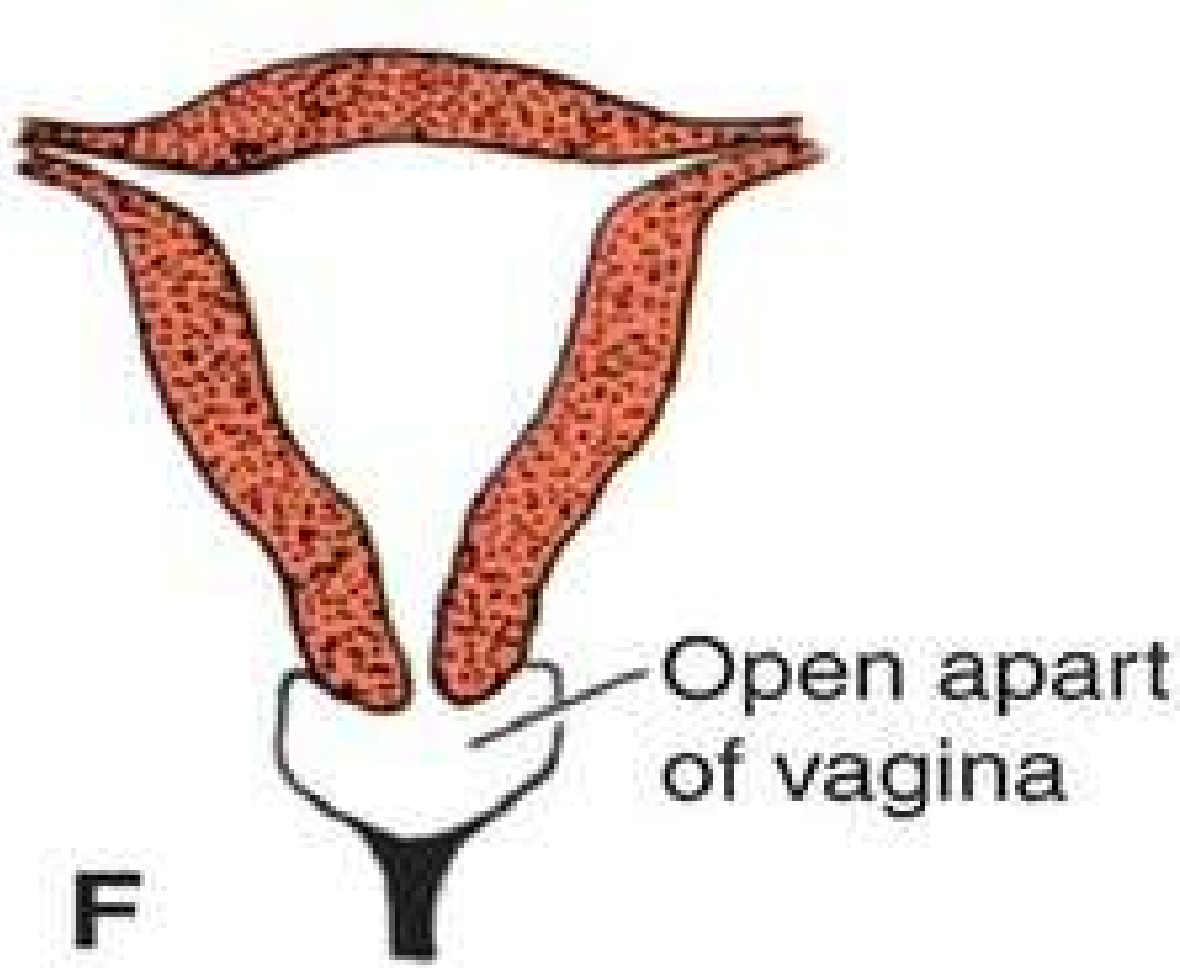
The complete absence of the vagina (aplasia vaginae) is due to underdevelopment of the lower divisions Muller moves.



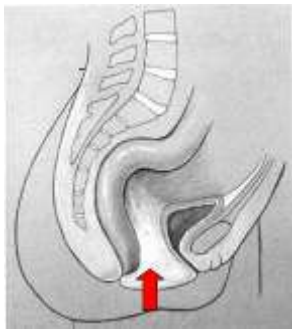



Матка/Собота 4
V5-9
ТИм 0.3

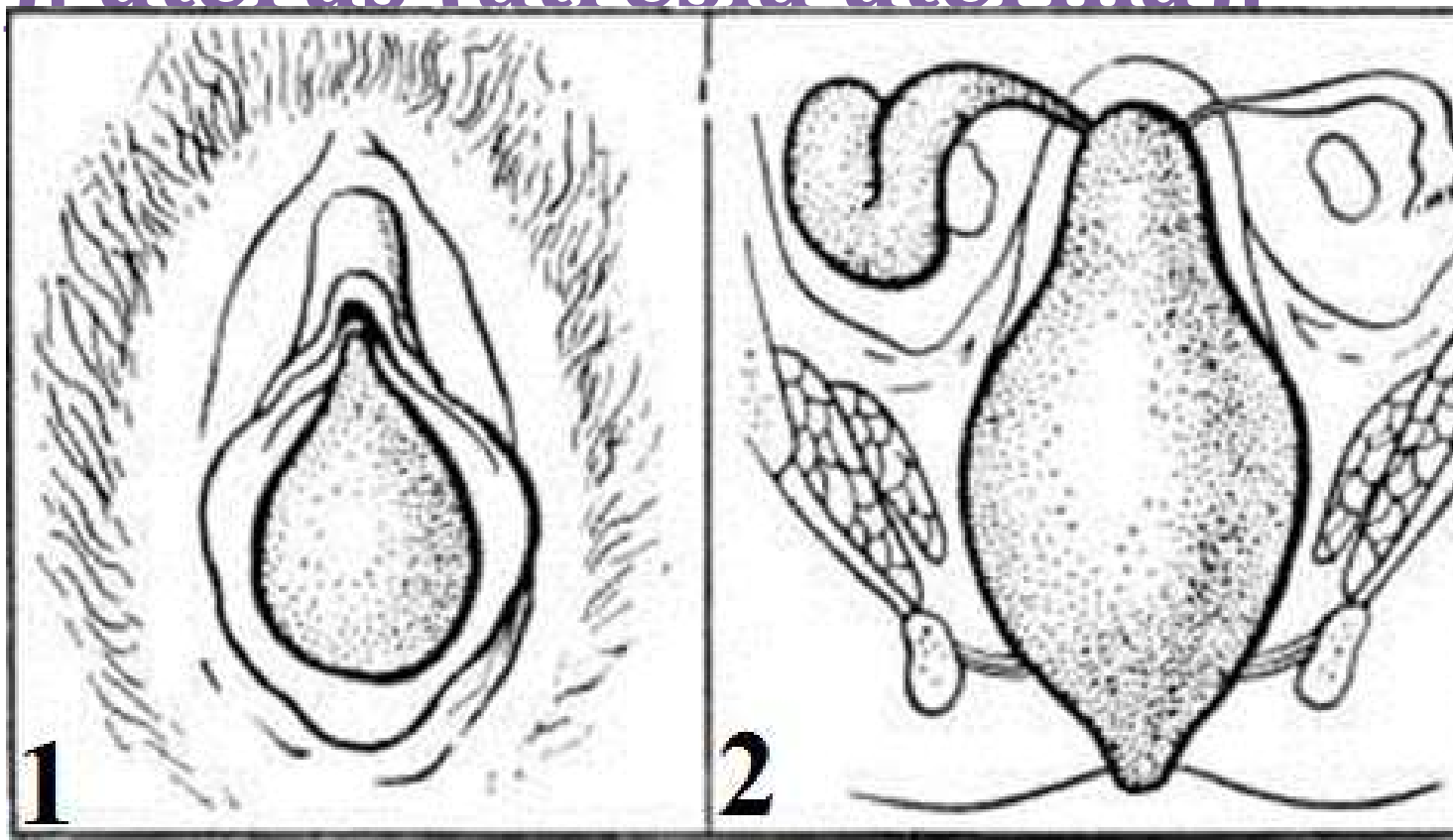
Atresia of the vagina

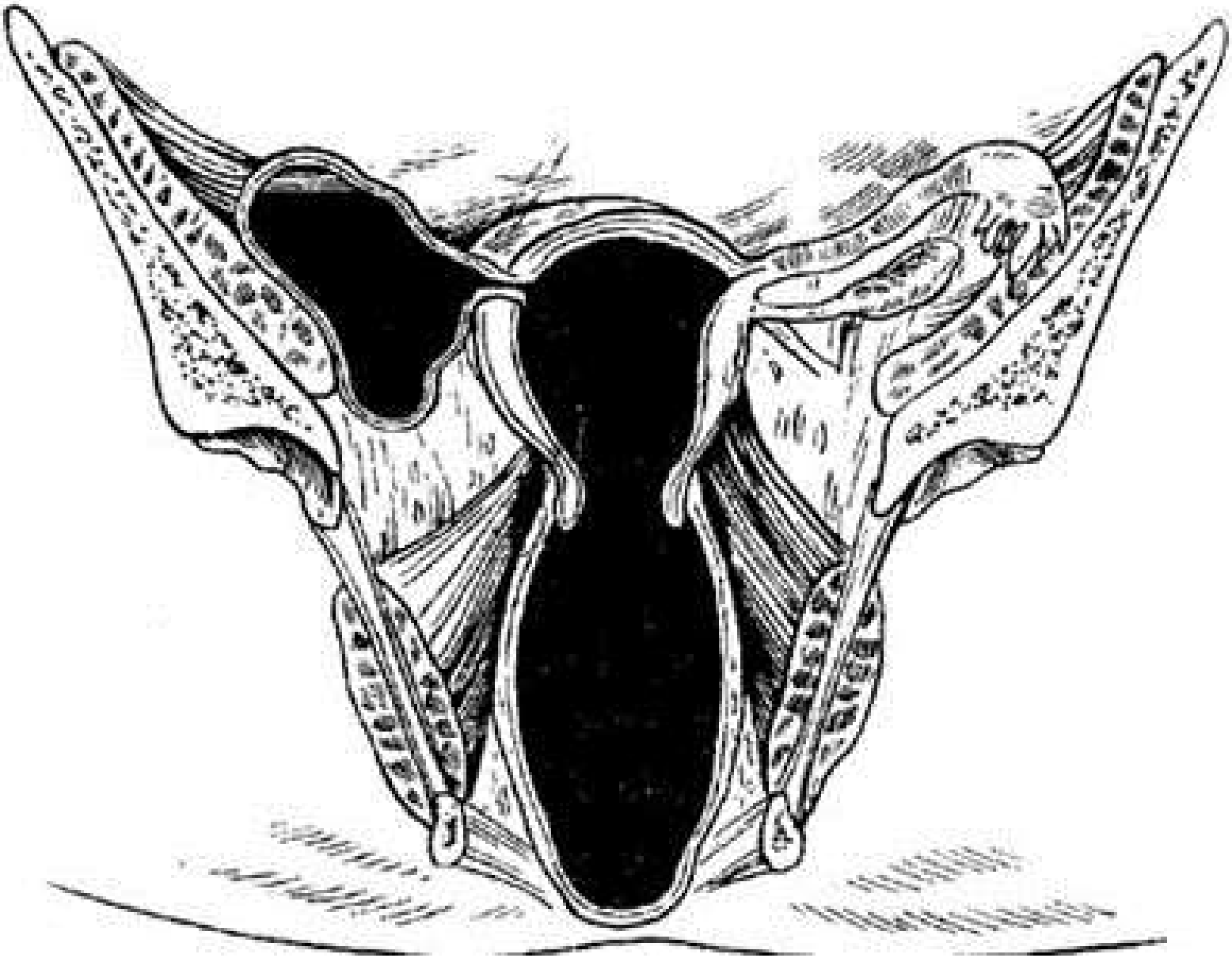


Atresia of vagina



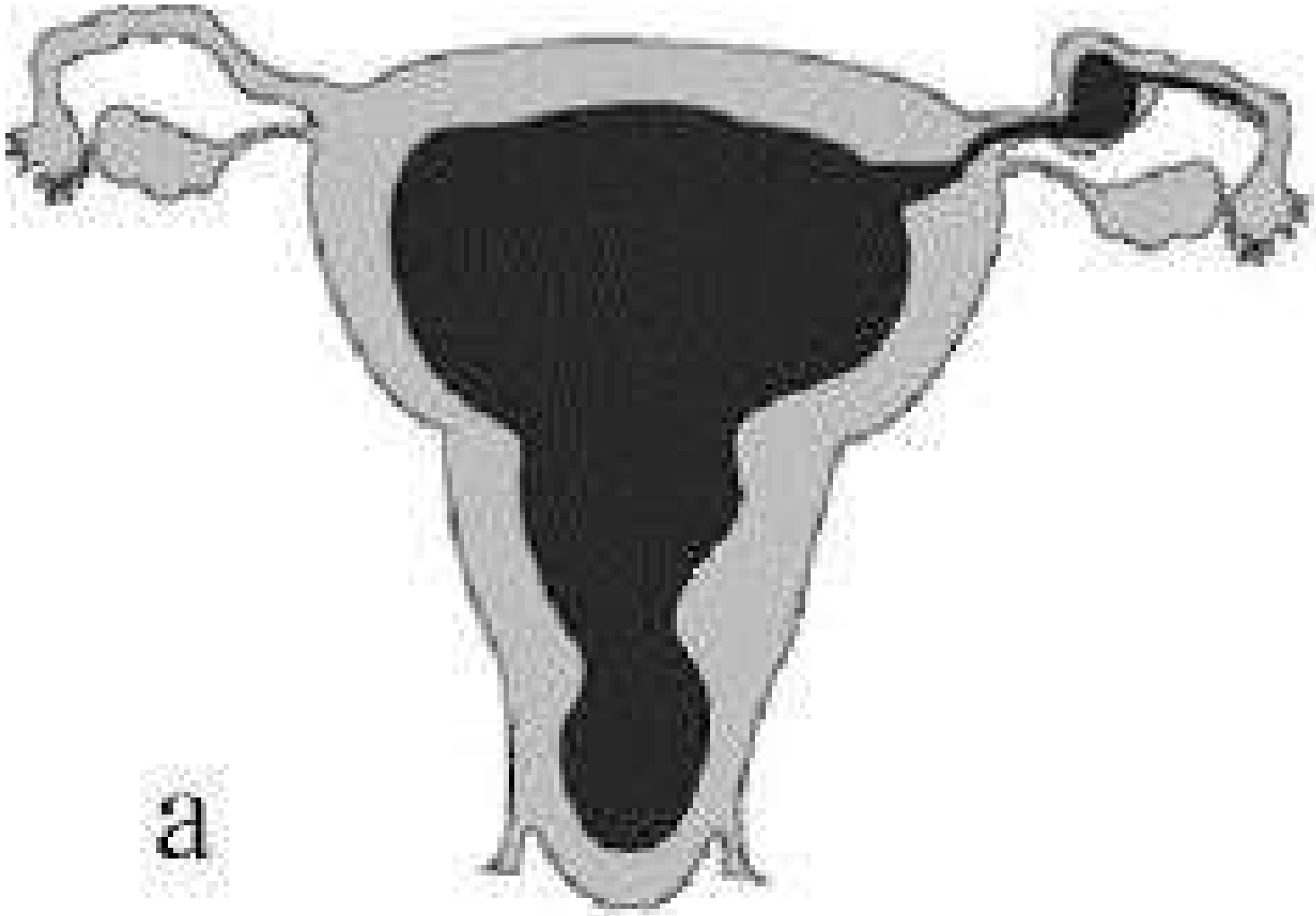
HINATREZIYA- sexual abuse patency of the channel in the region of the hymen (atresia hymenalis), vagina (atresia vaginalis), uterus (atresia uterina).



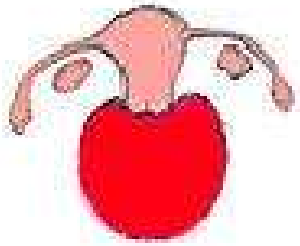


Atresia hymen.
Hematokolpos. Hematometra. Hematosalpinks.

Atresia hymen is only present with the onset of puberty, when it turns absence of menstruation. The blood released during menstruation, accumulates in the vagina, stretching its walls (haematocolpos). Overwhelmed tumor blood vagina takes shape, the upper pole which along with the uterus is placed above the plane of the entrance to a small bowl.

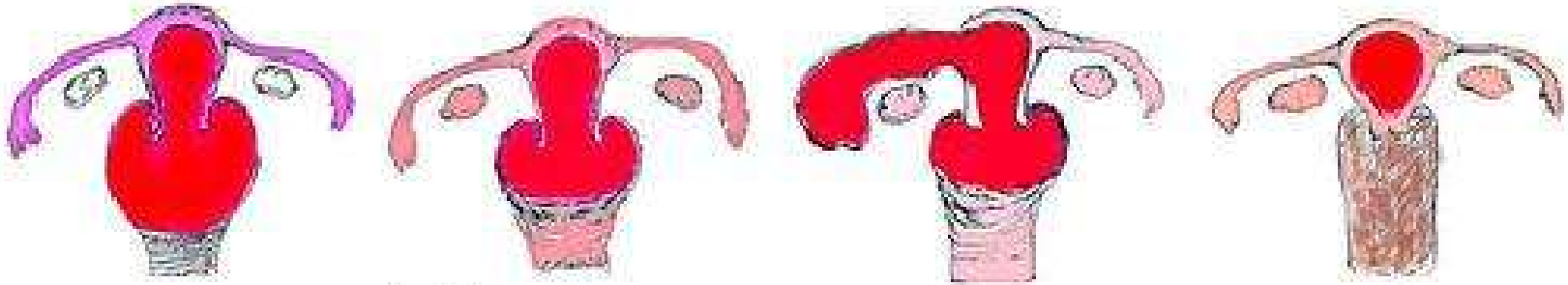

a

1. Атрезия гимена

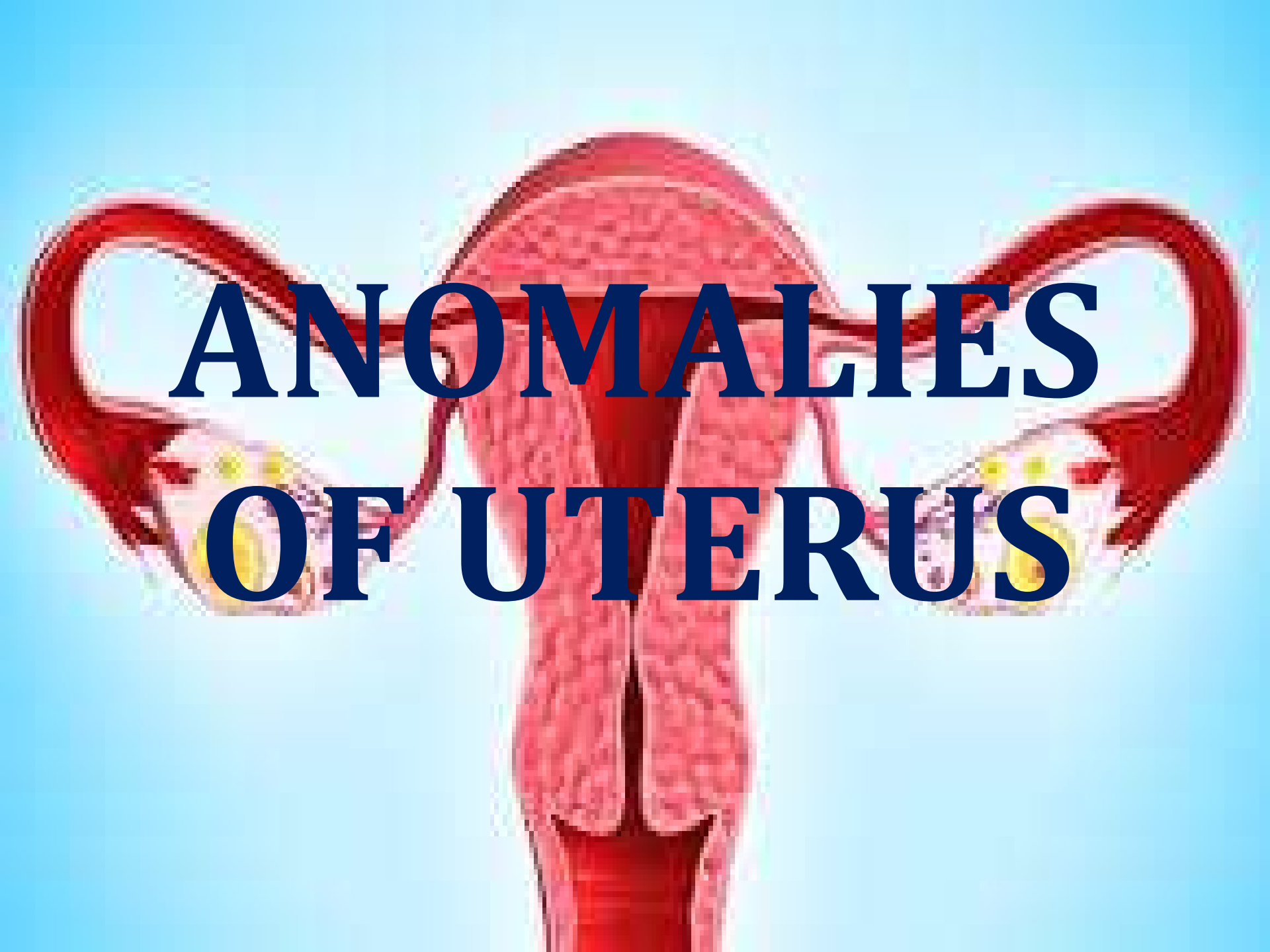


2. Аплазия влагалища и матки

3. Частичная или полная аплазия влагалища при функционирующей матке

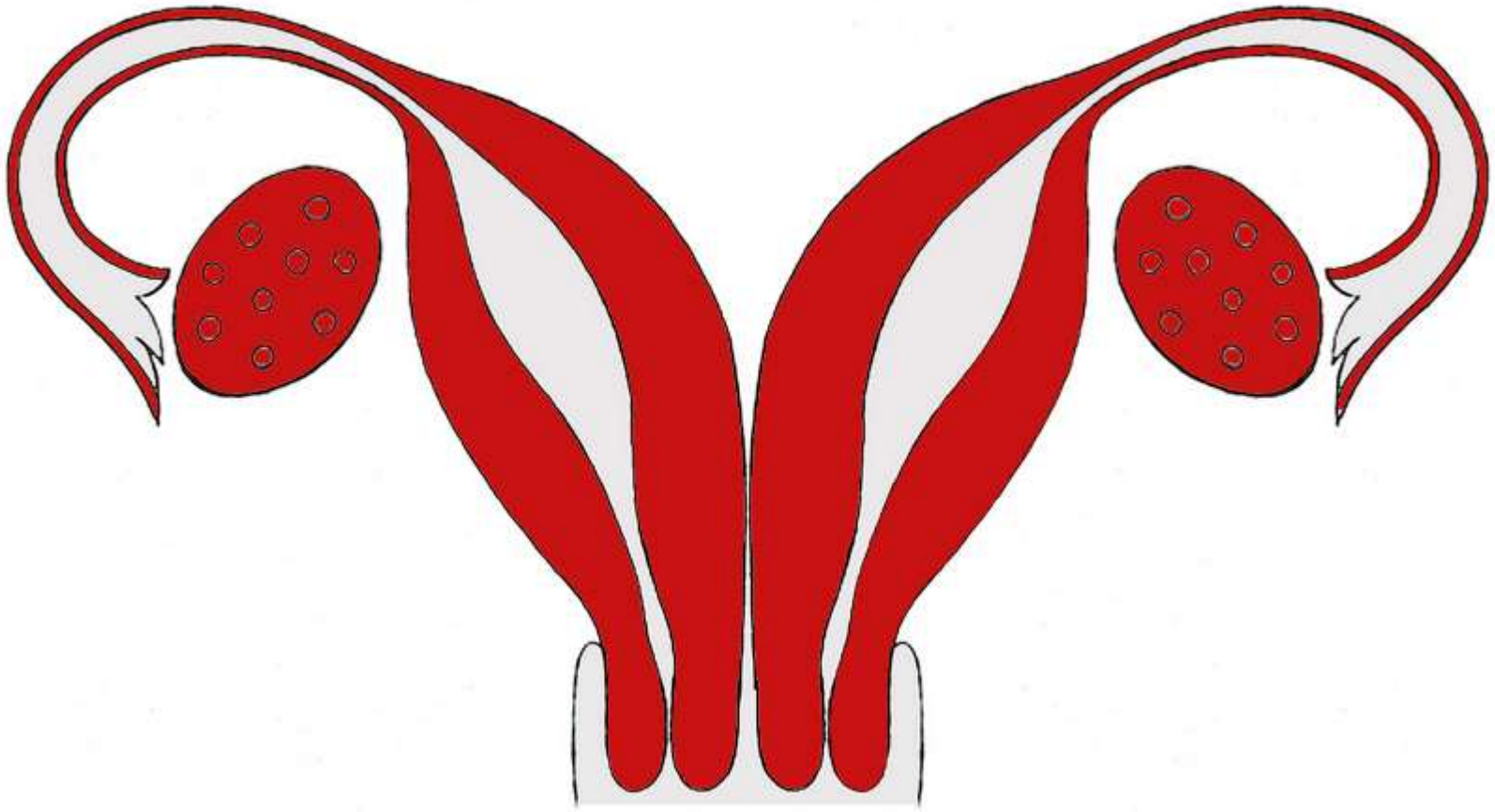


4. Удвоение влагалища и матки с частичной или полной аплазией одного из влагалищ

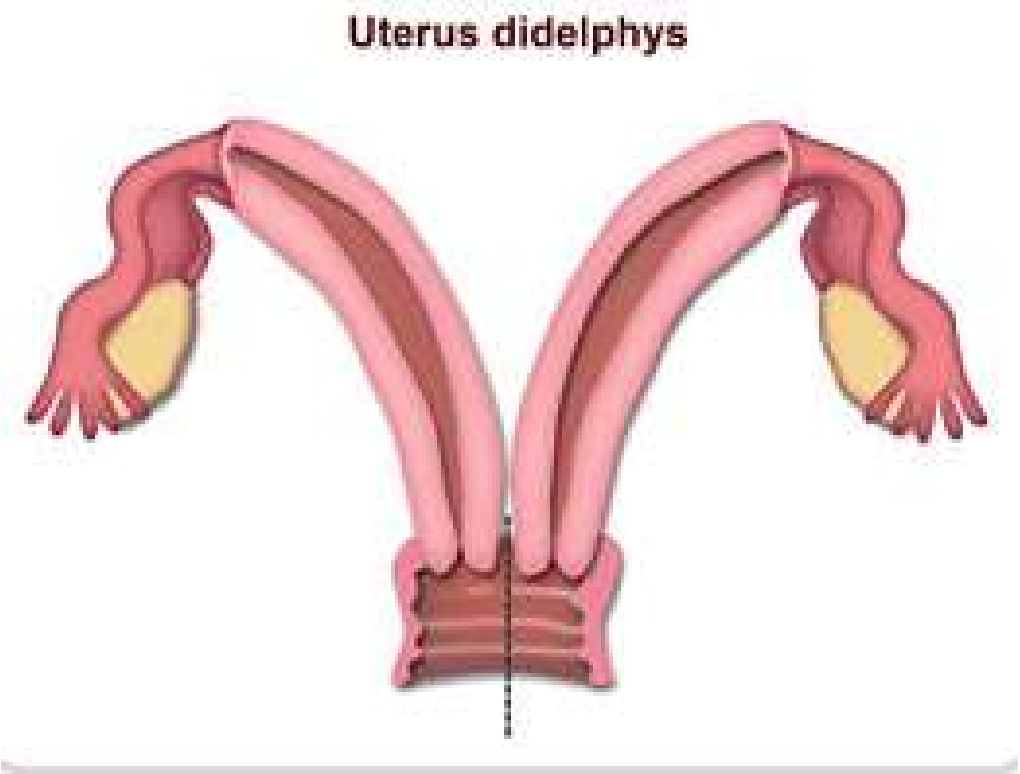


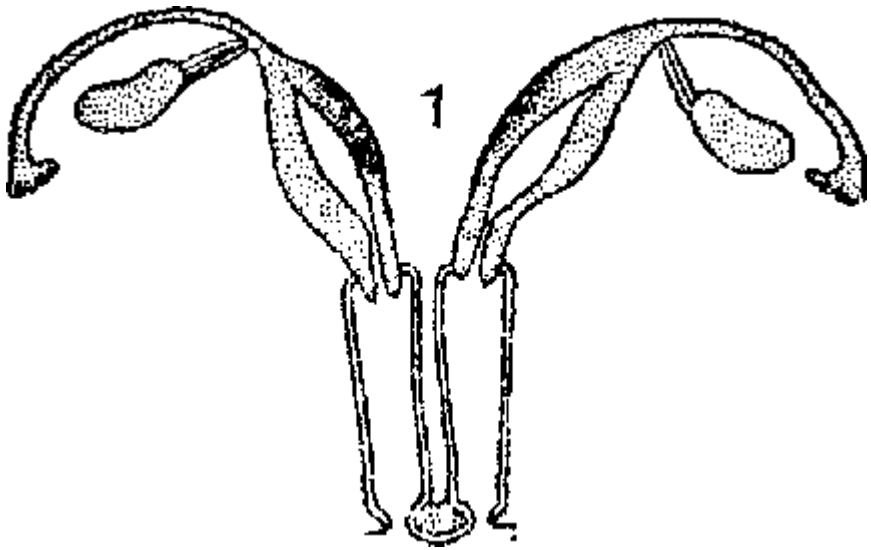
ANOMALIES OF UTERUS

Doubling the uterus and vagina resulting from disruption of connection sections Muller ducts, which are formed during normal embryogenesis uterus and vagina

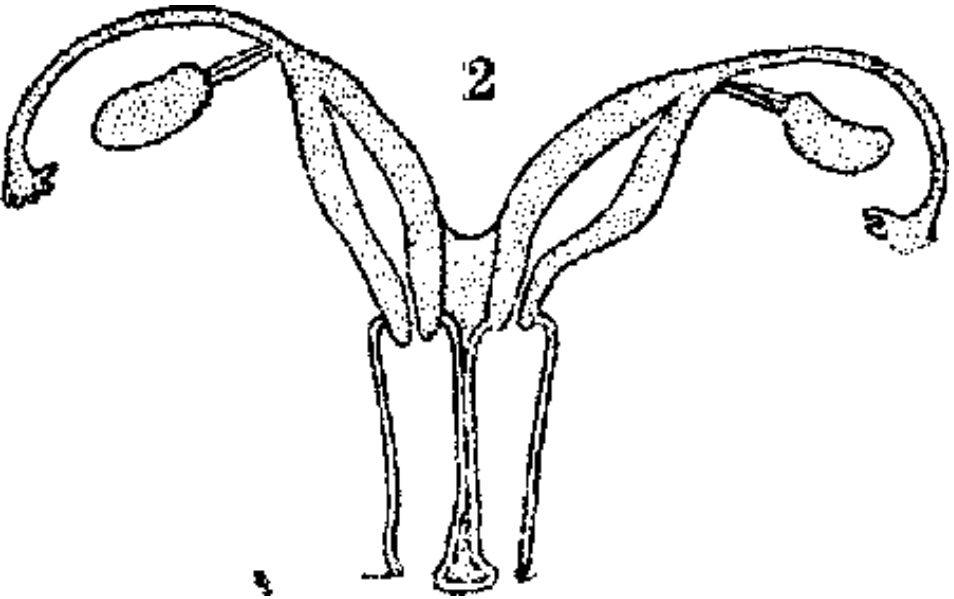


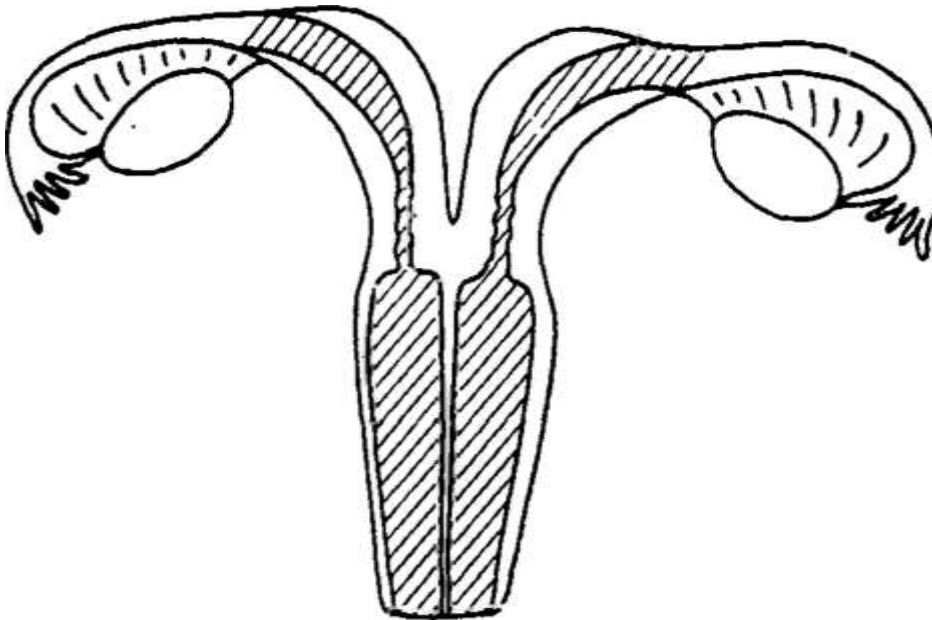
UTERUS DIDELPHYS - the presence of two distinct genitalia: two females (each have one tube and one ovary) two necks, two vagina. The uterus and vagina are placed separately, are between the bladder and the rectum.



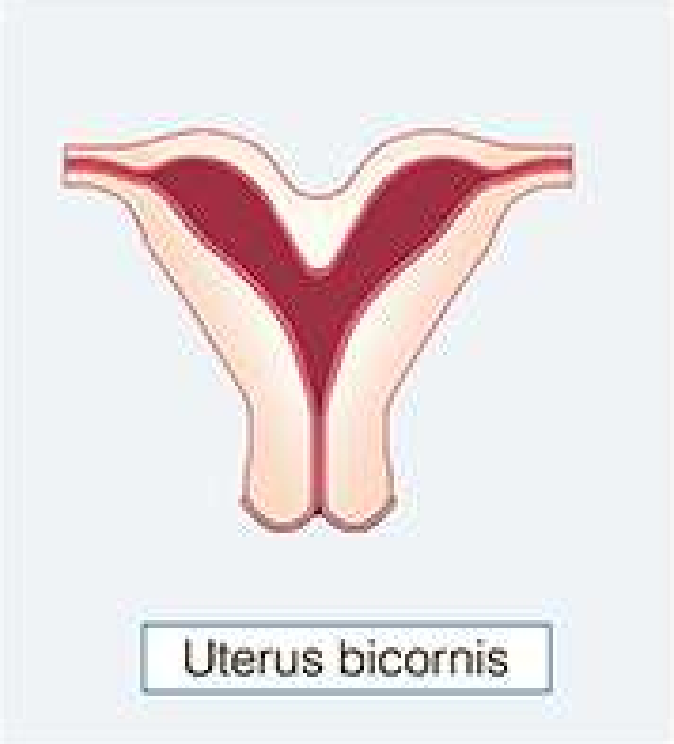


UTERUS DUPLEX ET VAGINA DUPLEX - there are two females, two necks and two vaginas. Both are connected to the uterus in a limited area, usually in the area of cervical fibro-muscular septum.

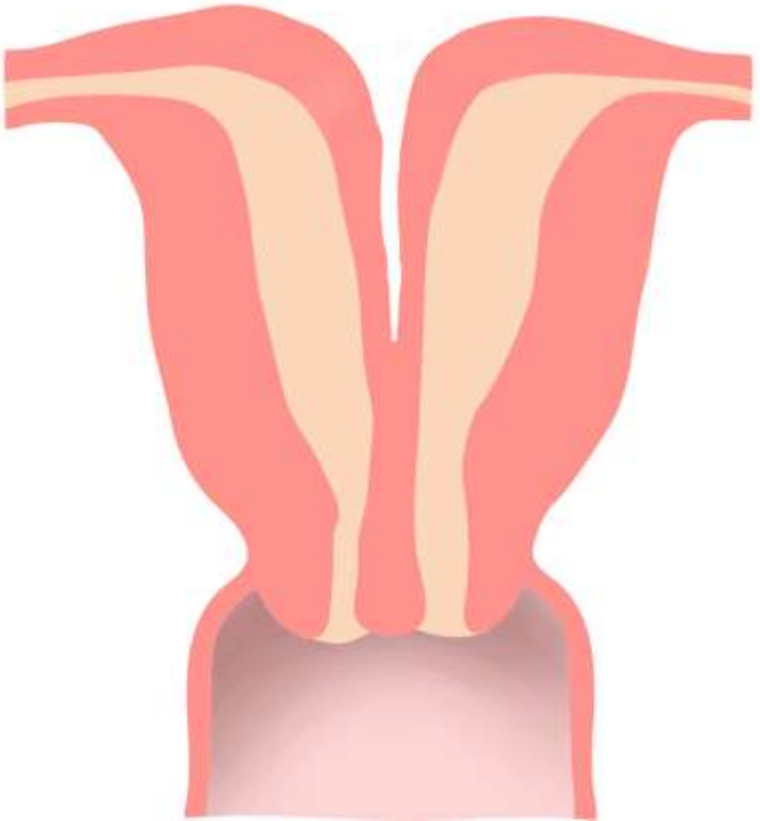




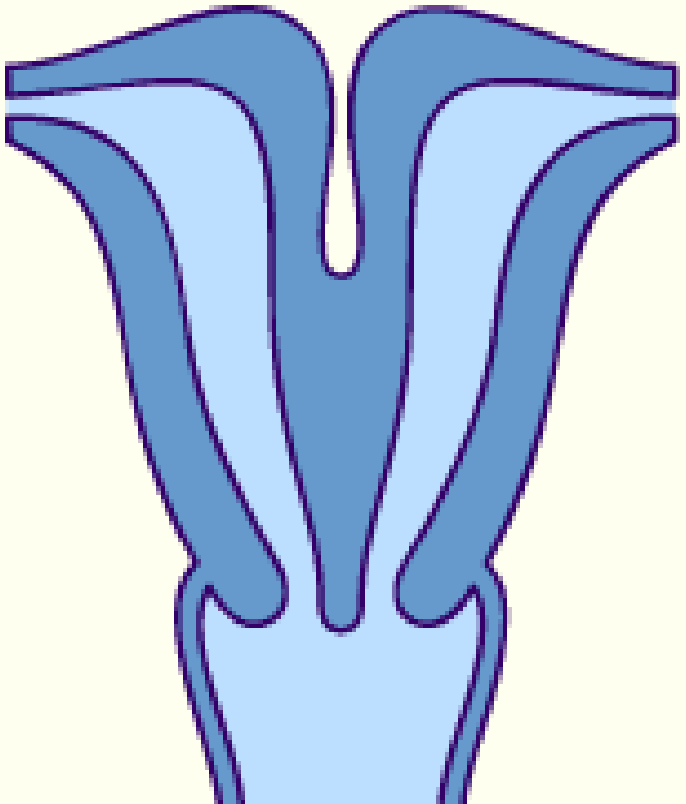
UTERUS BICORNIS - Antlered uterus arising from the merger paramesonephral moves. As a result, there is a general vagina, and other organs bifurcated.



When the uterus may be antlered two neck - UTERUS BICOLLIS. This vagina is normal structure or it may be part partition.

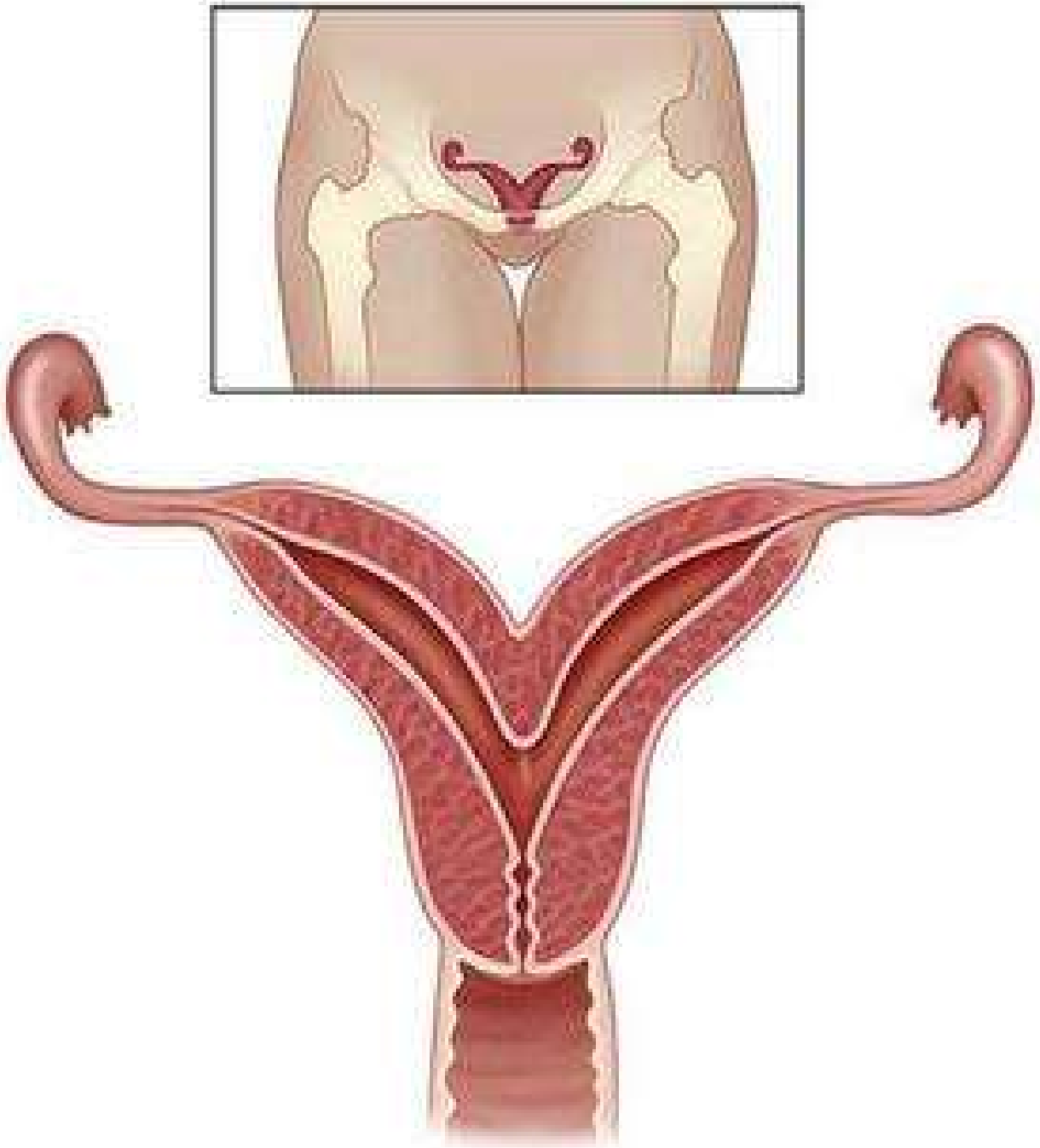


Sometimes when antlered uterus may be a neck that is formed from a complete merger of both halves - UTERUS BICORNIS UNCOLLIS.



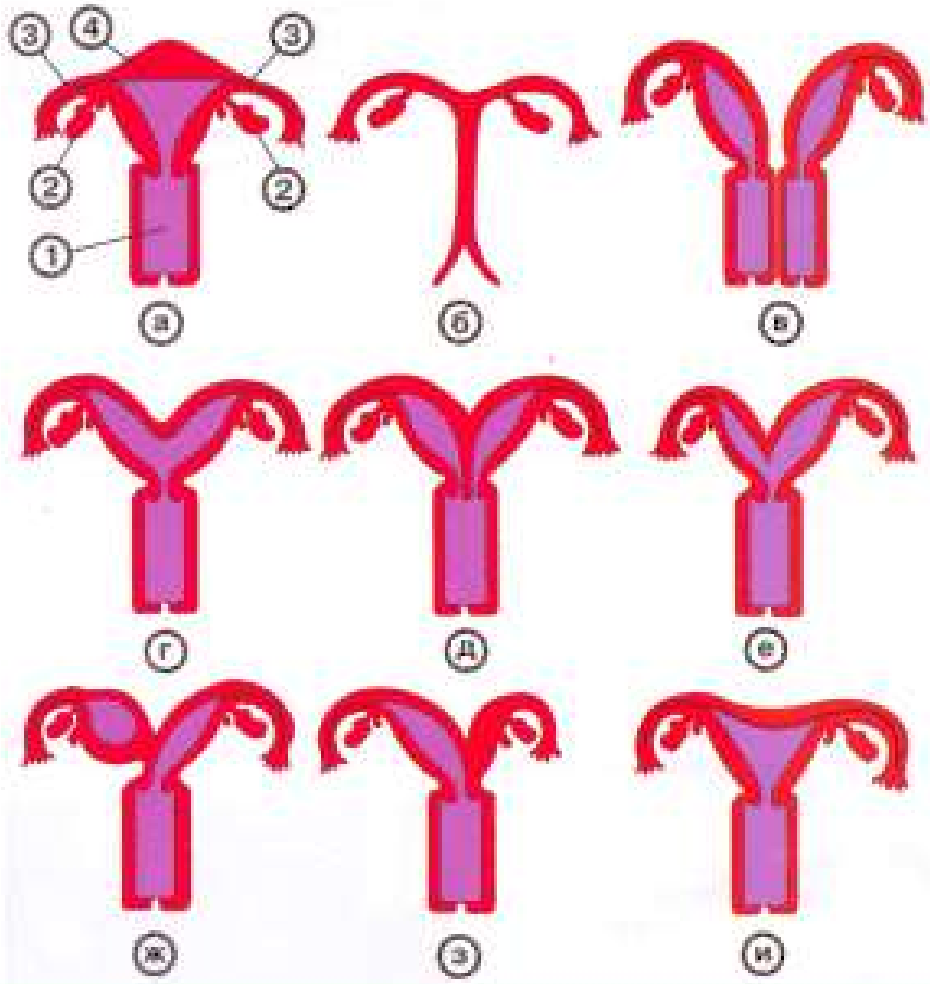
Perhaps almost complete fusion of the two horns except the bottom, which produce a deepening saddle - a saddle-shaped uterus (UTERUS ARCUATUS).

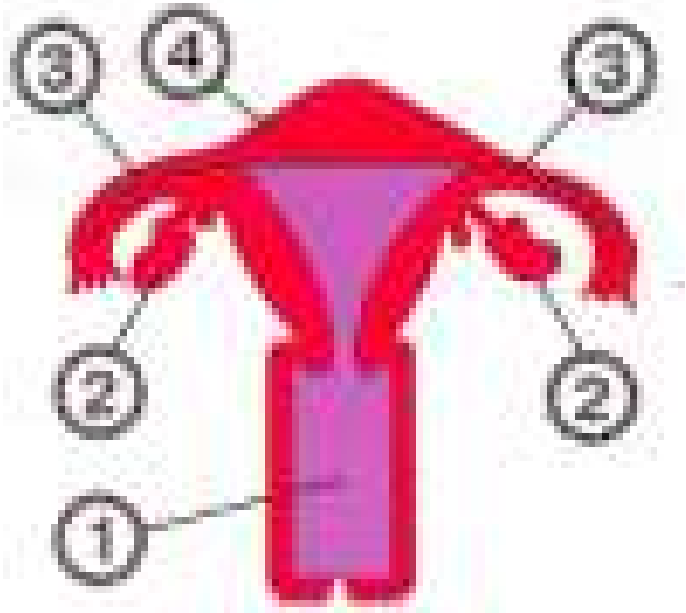
In the saddle-shaped uterus may be a partition that covers the entire cavity or partial membrane in the bottom or cervix.



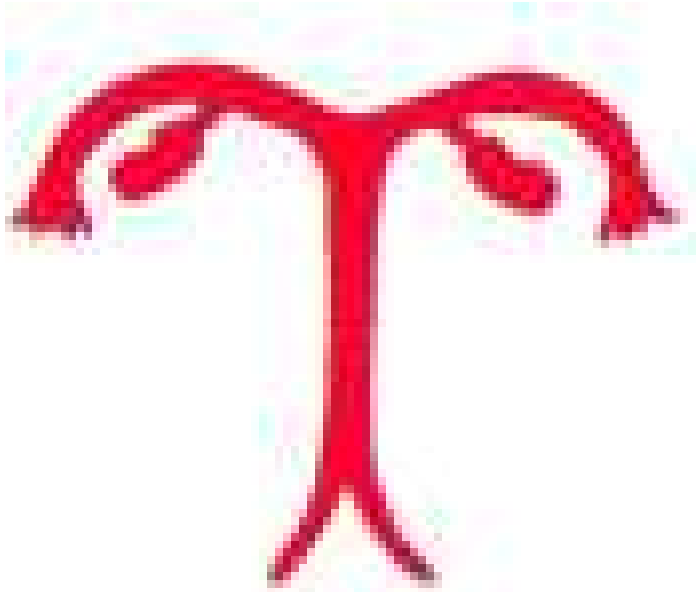
Внутренние половые органы женщины в норме и при некоторых пороках развития матки и влагалища

а - норма (1 - влагалище, 2 - яичник, 3 - маточная труба, 4 - матка);
б - аплазия матки и влагалища (отсутствие матки и влагалища);
в — удвоение матки и влагалища;
г — двурогая матка с одной шейкой;
д - двурогая матка с двумя шейками;
е - двурогая матка с неодинаково развитыми рогами;
ж - двурогая матка с функционирующим замкнутым рогом;
з — двурогая матка с атрезированным левым рогом;
и - седловидная матка.

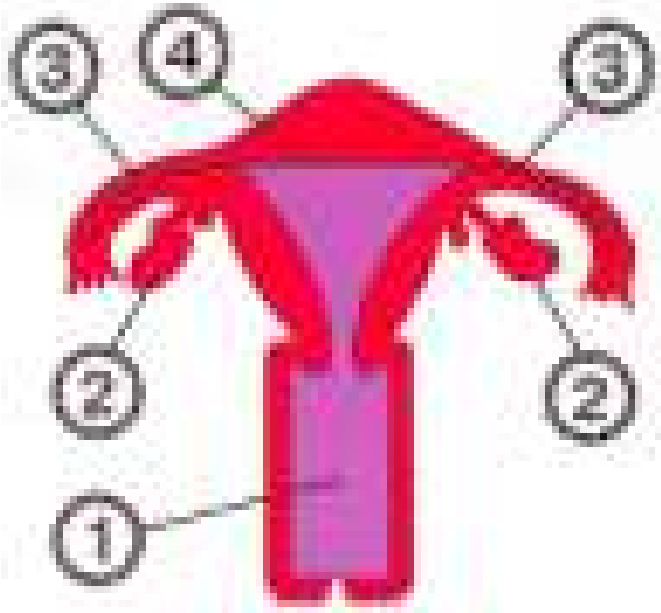




норма

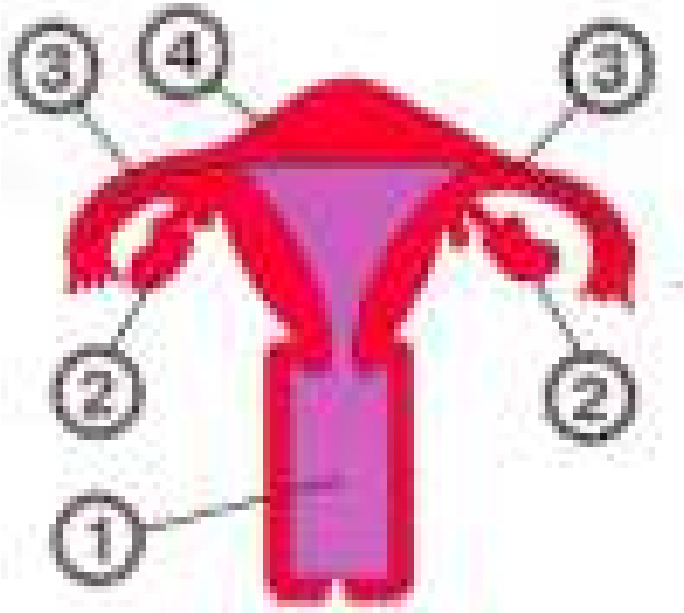


Aplasia (lack of) uterus and vagina

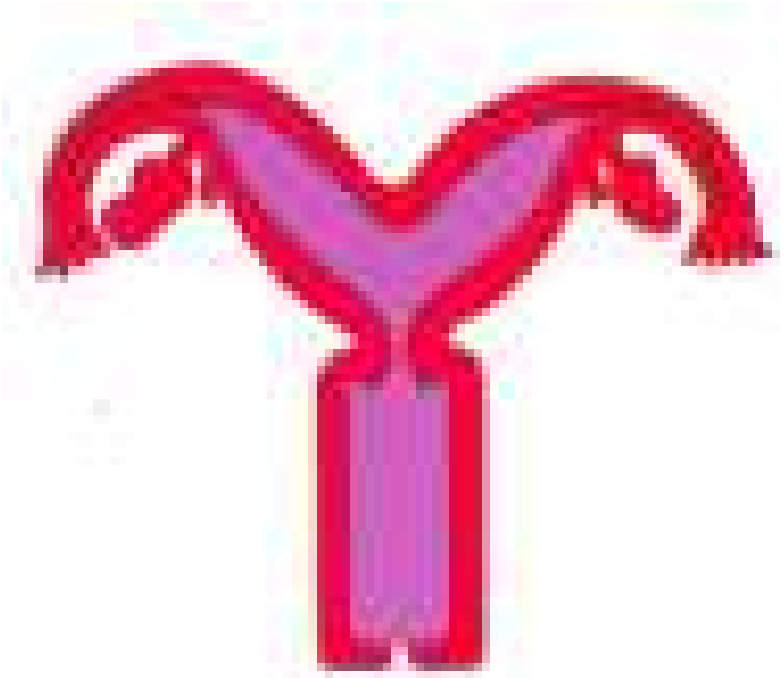


норма

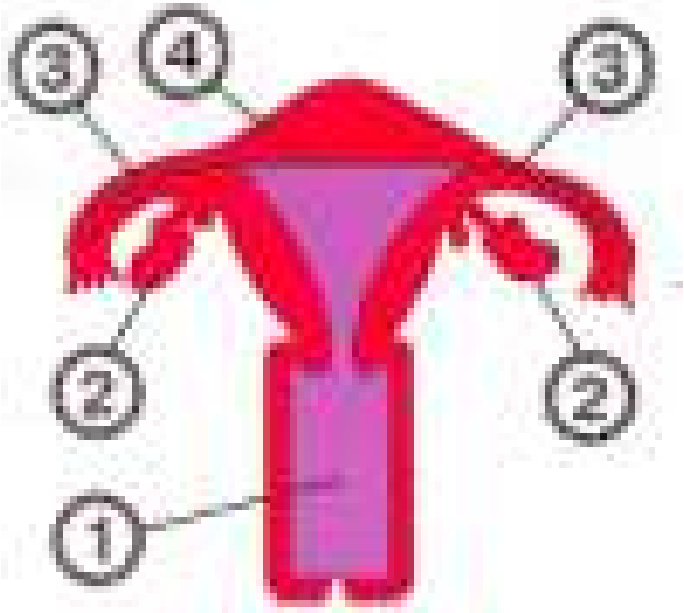
doubling
uterus and vagina



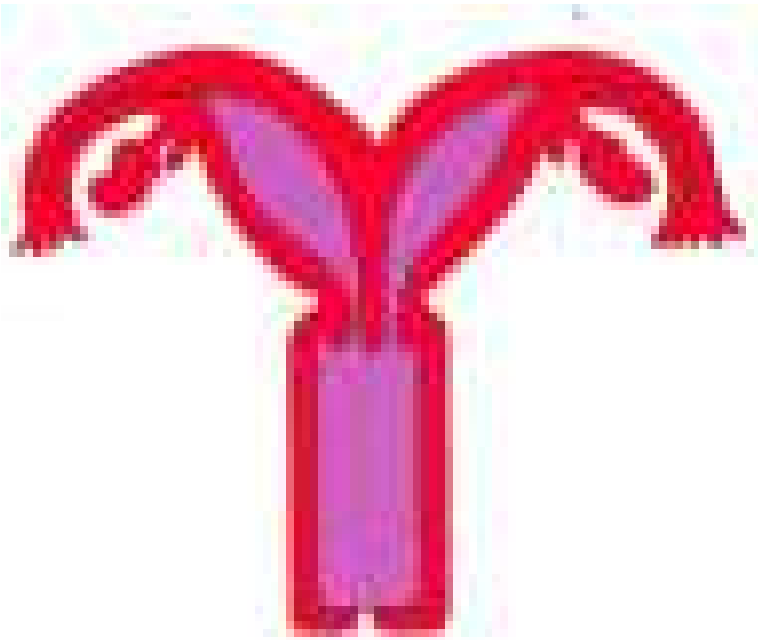
норма



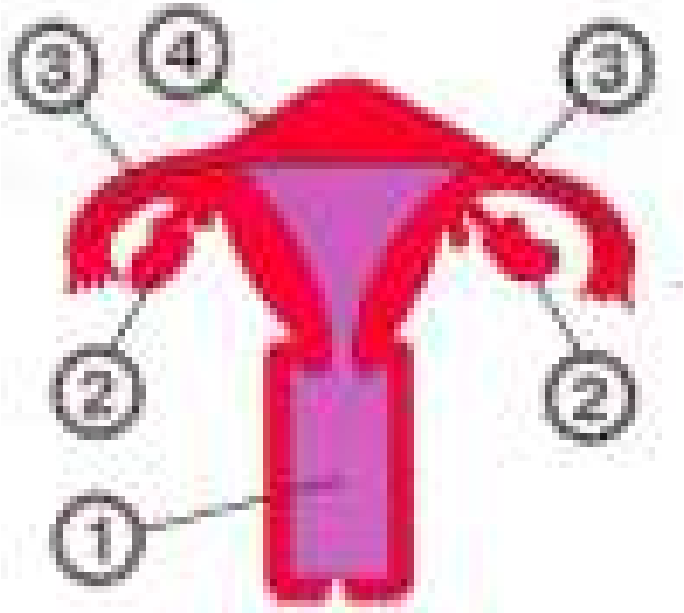
bicornum
uterus with one neck



норма

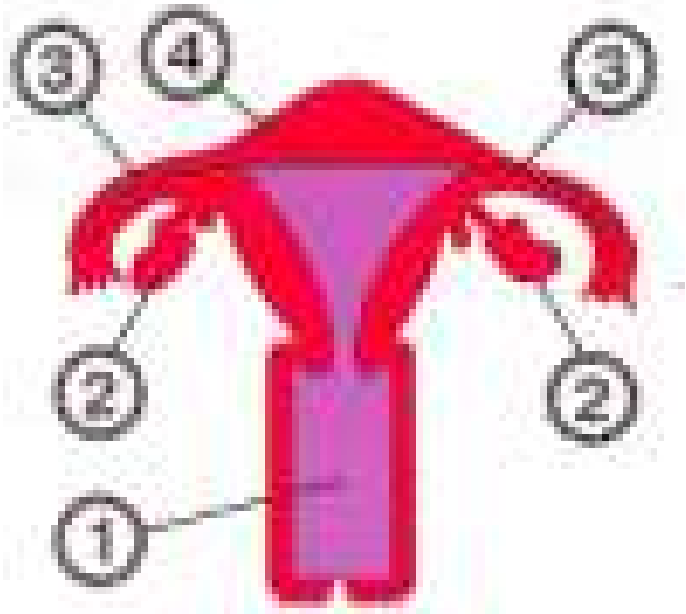


bicornum uterus with two tails



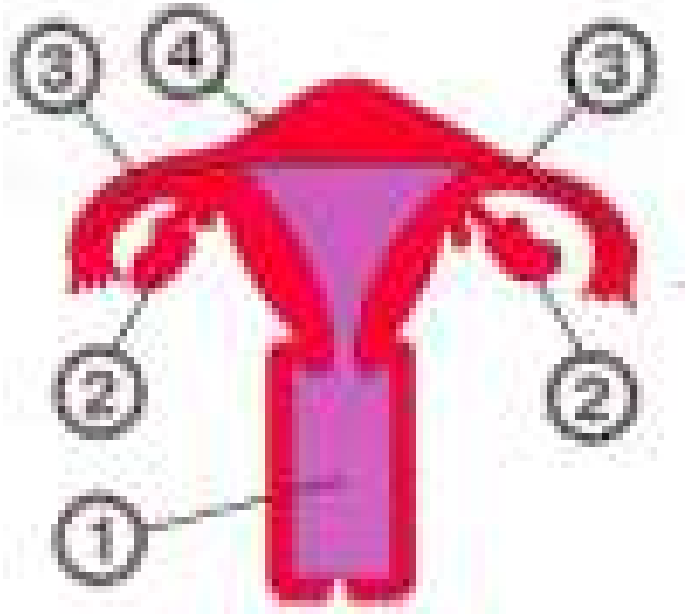
норма

bicornum uterus
with unequally developed tails



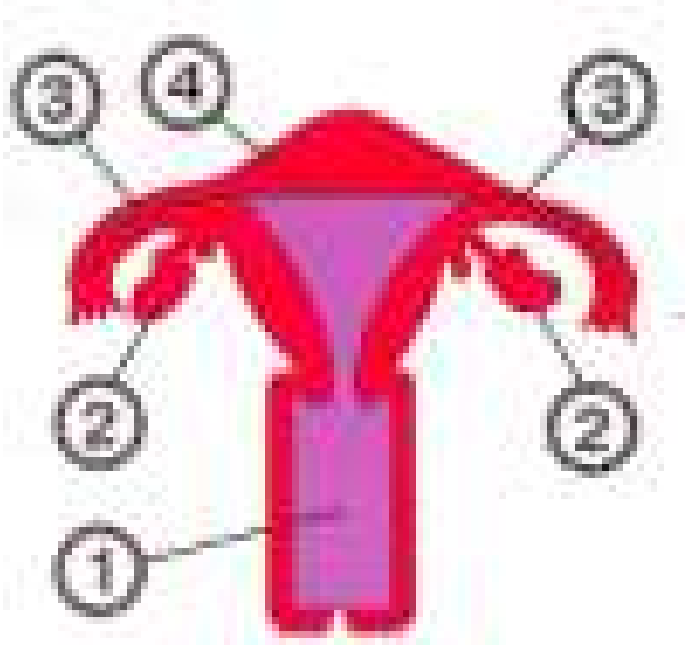
норма

bicornum uterus
closed with a functioning horn



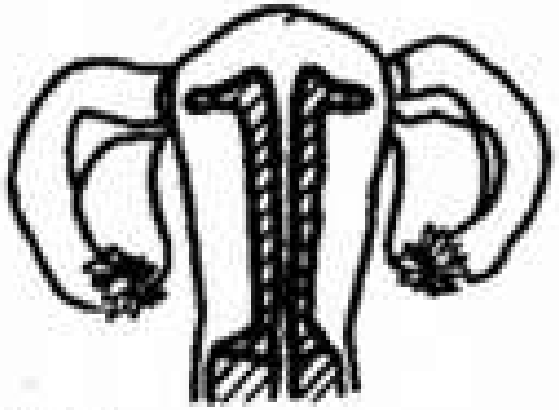
норма

bicornum uterus
left corner of atrezovanym

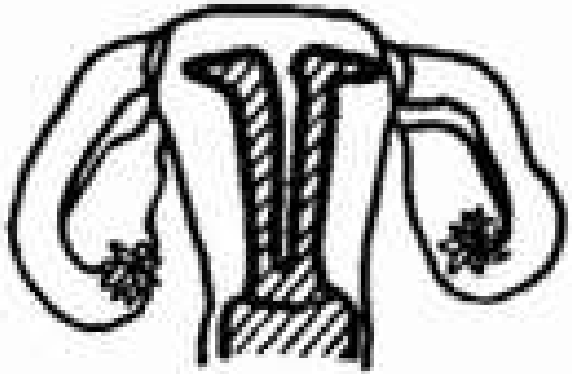


норма

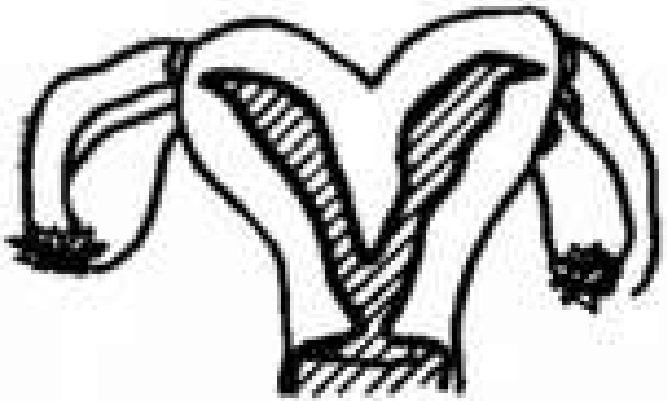
saddle-shaped uterus



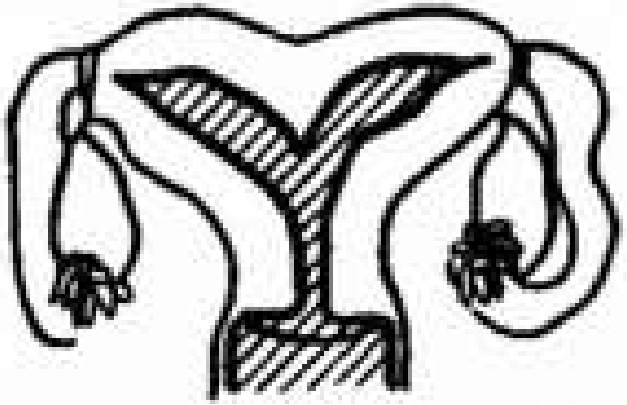
Удвоение матки с удвоением влагалища



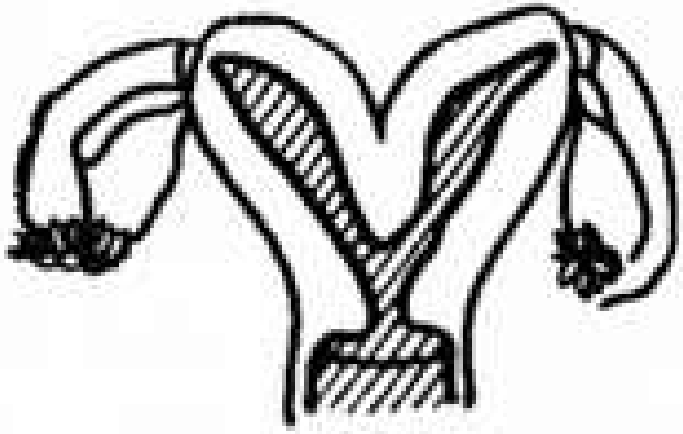
Удвоенная матка



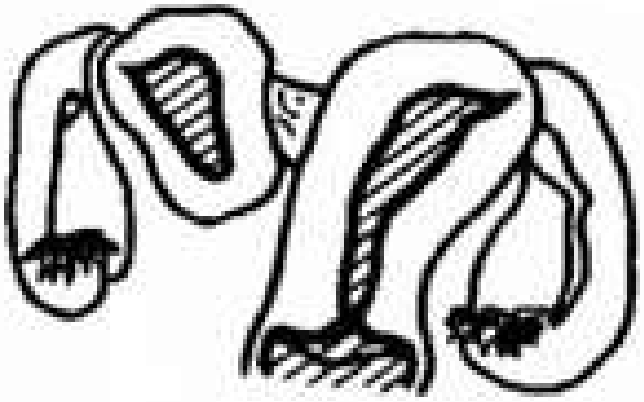
Двурогая матка
с одной шейкой



Седловидная матка с
частичной перегородкой

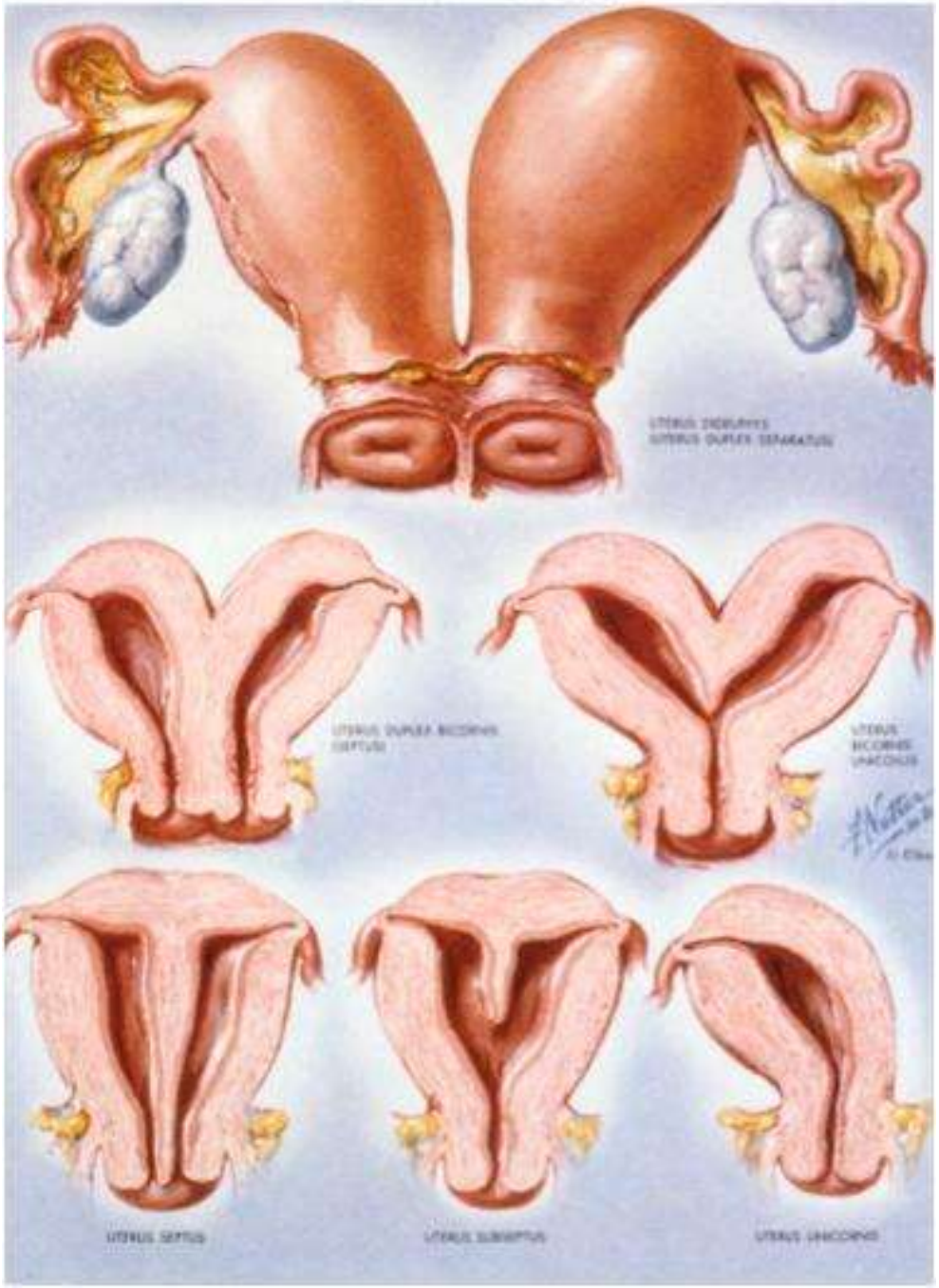


Двурогая матка с одной шейкой (более тяжёлая форма аномалии)



Двурогая матка с одной шейкой и рудиментарным рогом

Congenital Anomalies



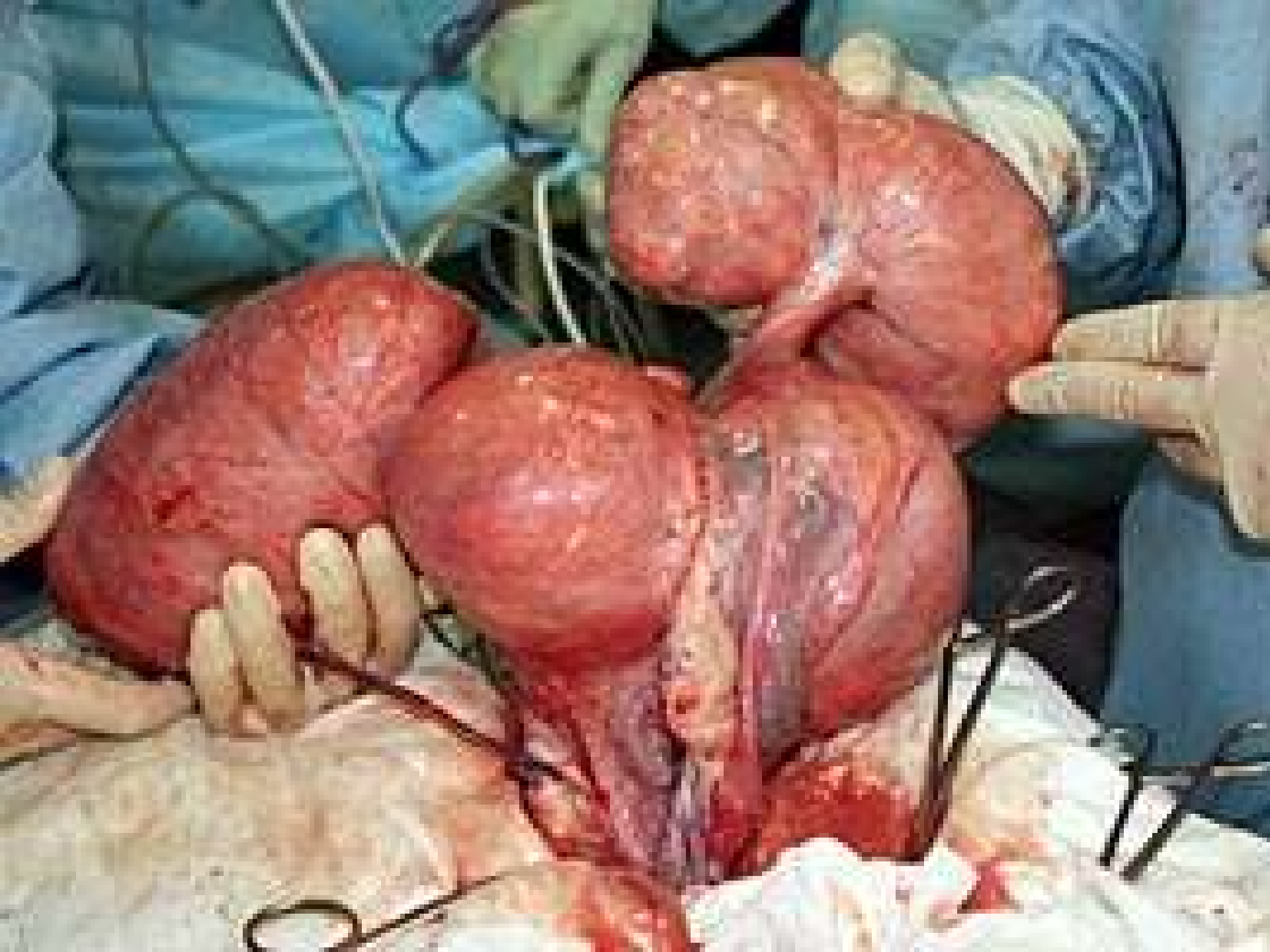
Uterine myoma (fibroid, leiomyoma)

This is a benign tumor that occurs in the muscular layer of the uterus - myometrium. It is one of the most common woman's diseases, reaching 12 - 25% of all gynecological diseases.

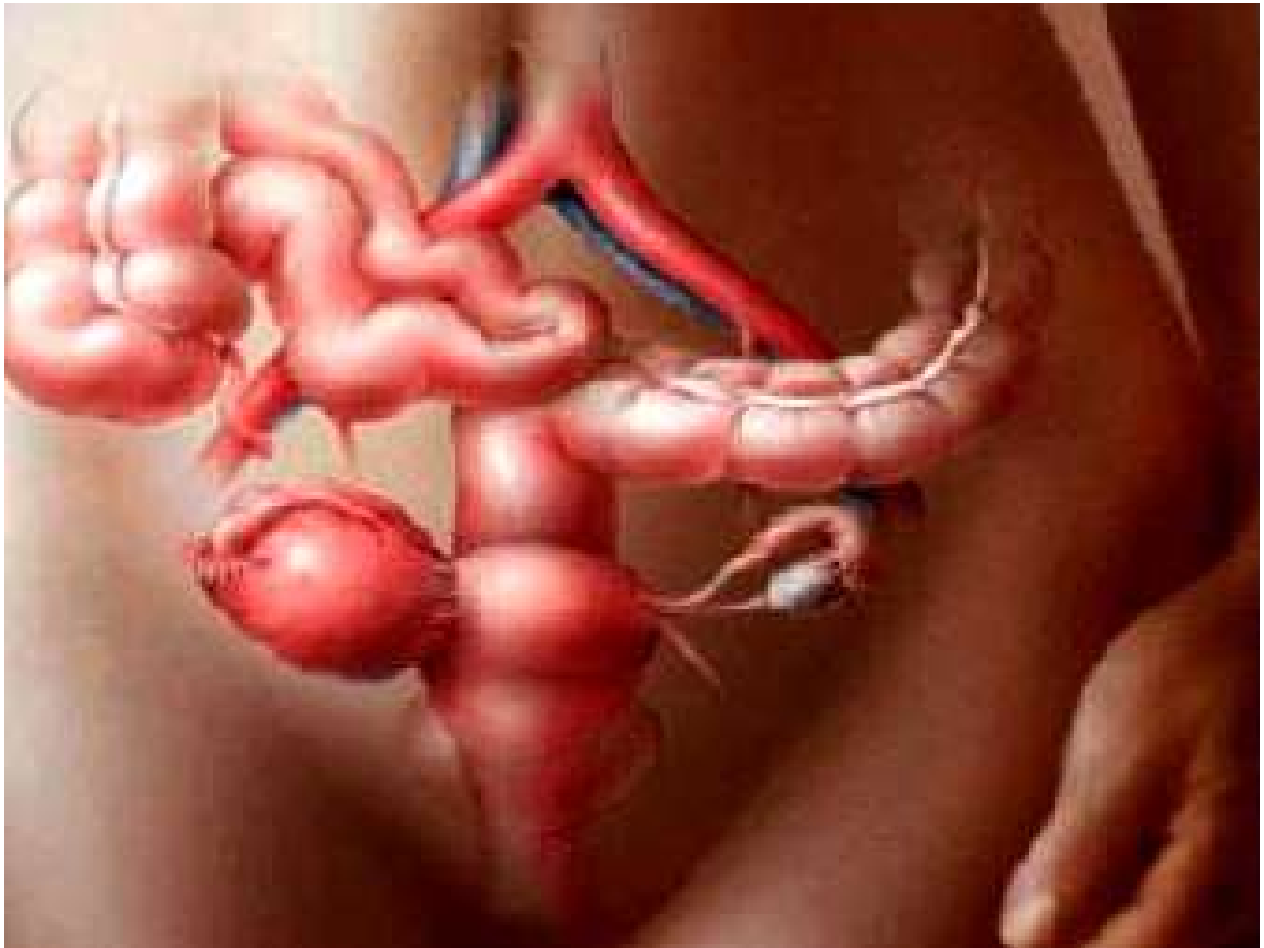
The highest incidence of uterine fibroids in late reproductive period and before menopause.

Миома матки

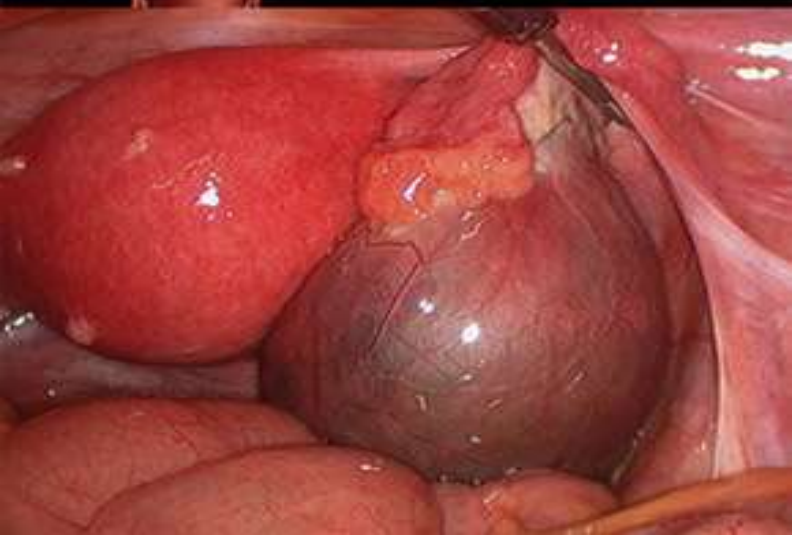

субсерозная миома
субмукозная миома
маточная труба
субсерозная миома
яичник
интрамуральная миома
матка
субмукозная миома
шейка матки

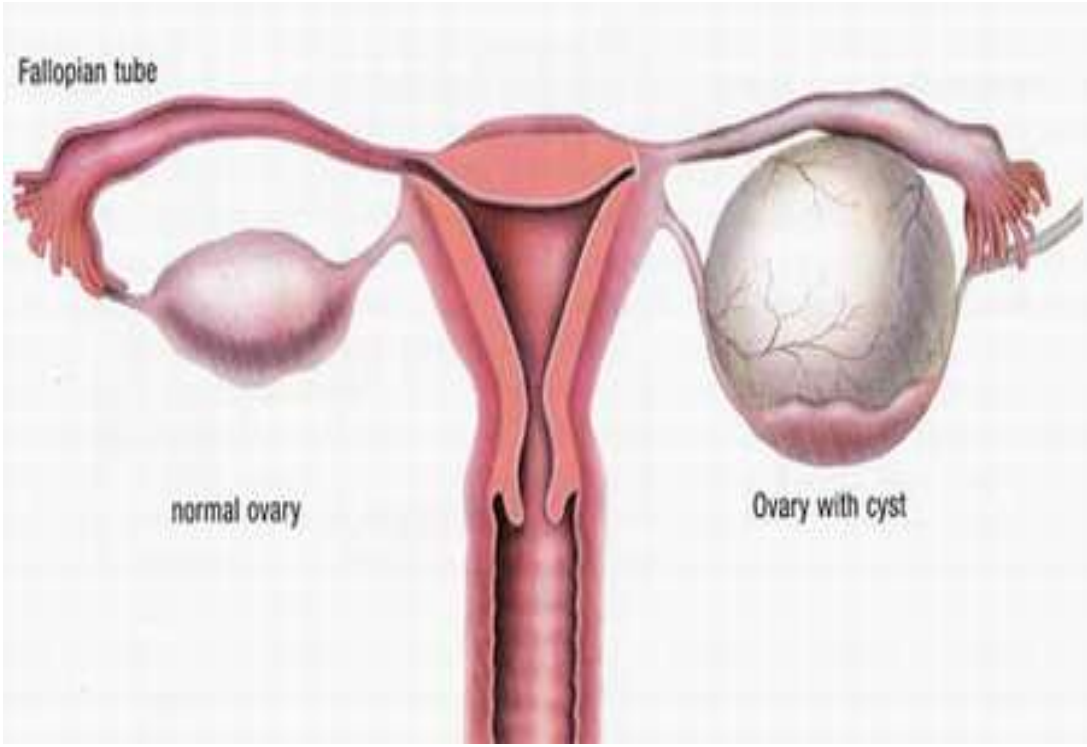


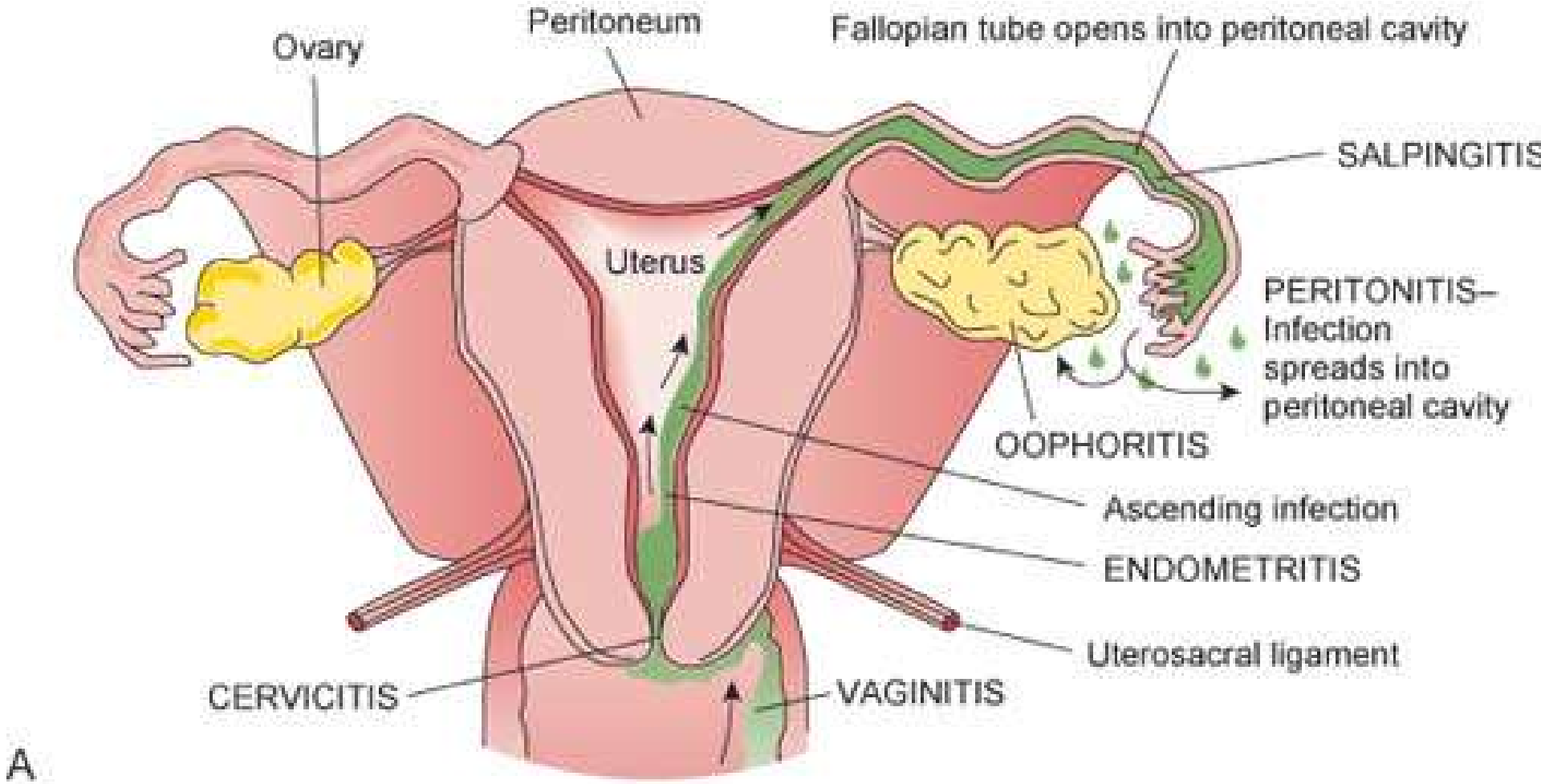
Cyst derived from the Greek word kystis - which means bubble. Ovarian cyst - a benign tumor of the ovary, which refers to the process of tumor, which is a cavity that is filled with liquid contents.




Фолликулярная киста

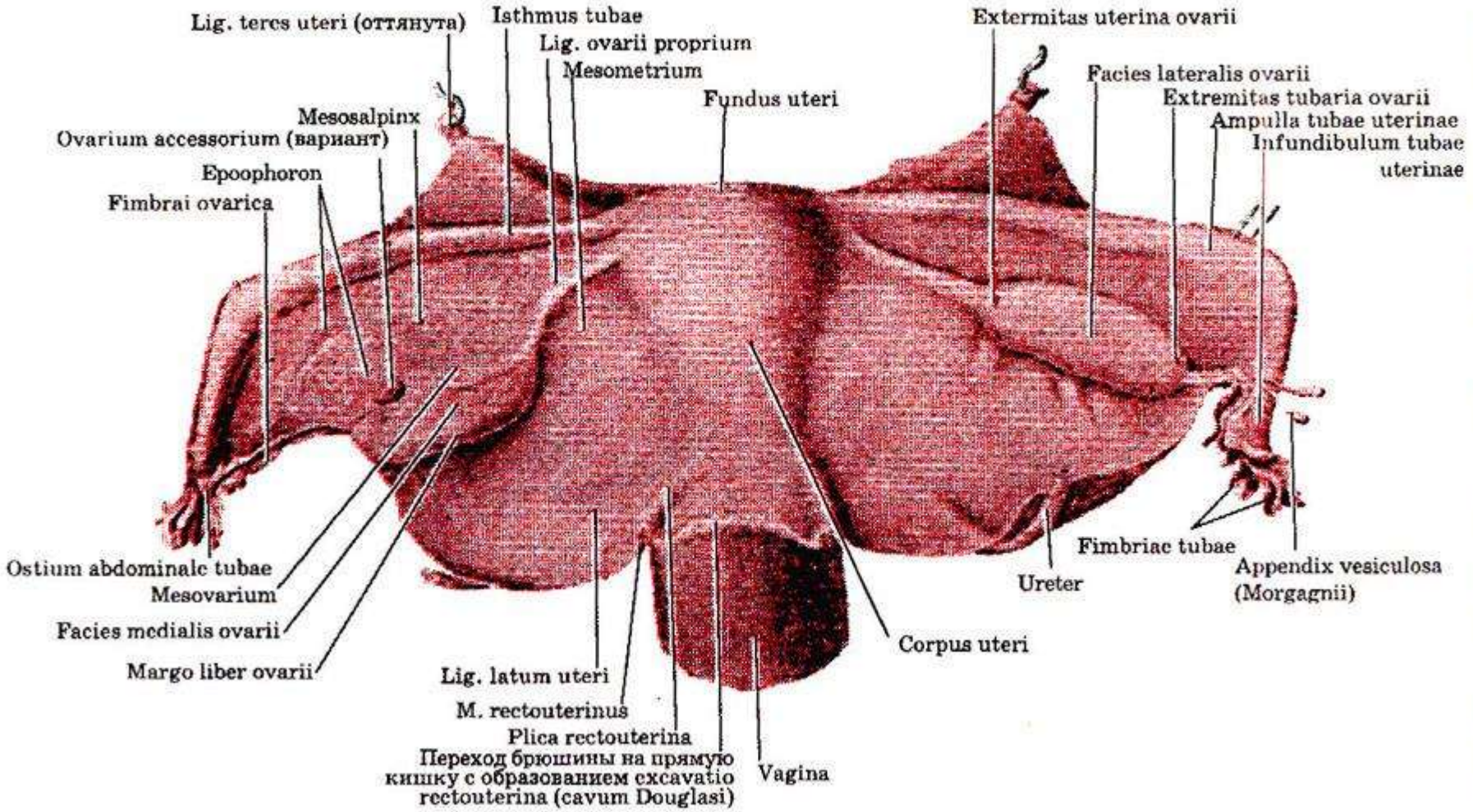



Fallopian tube
normal ovary
Ovary with cyst

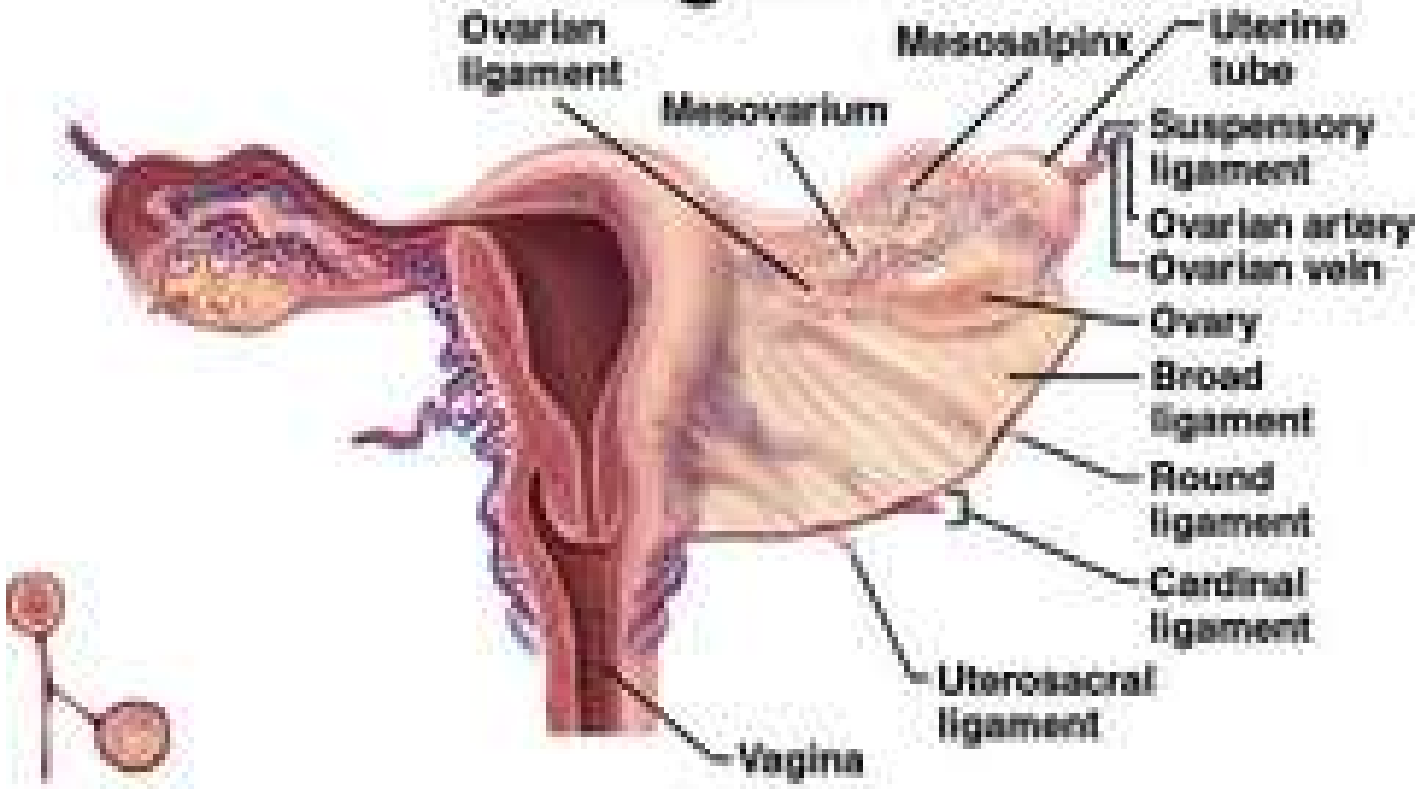

Ovary
Peritoneum
Fallopian tube opens into peritoneal cavity
SALPINGITIS
Uterus
PERITONITIS–
Infection
spreads into
peritoneal cavity
OOPHORITIS
Ascending infection
ENDOMETRITIS
Uterosacral ligament
CERVICITIS
VAGINITIS

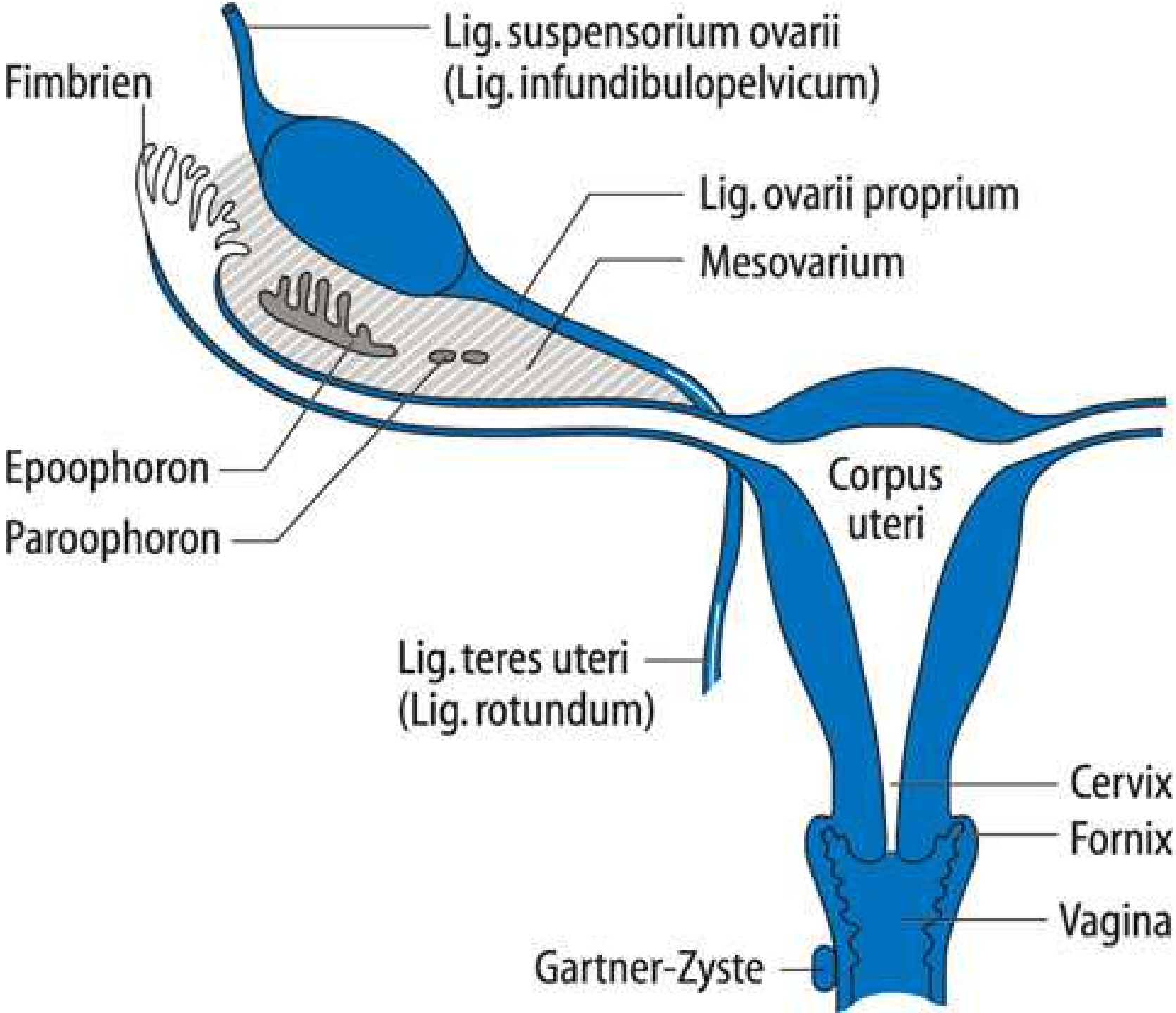
A

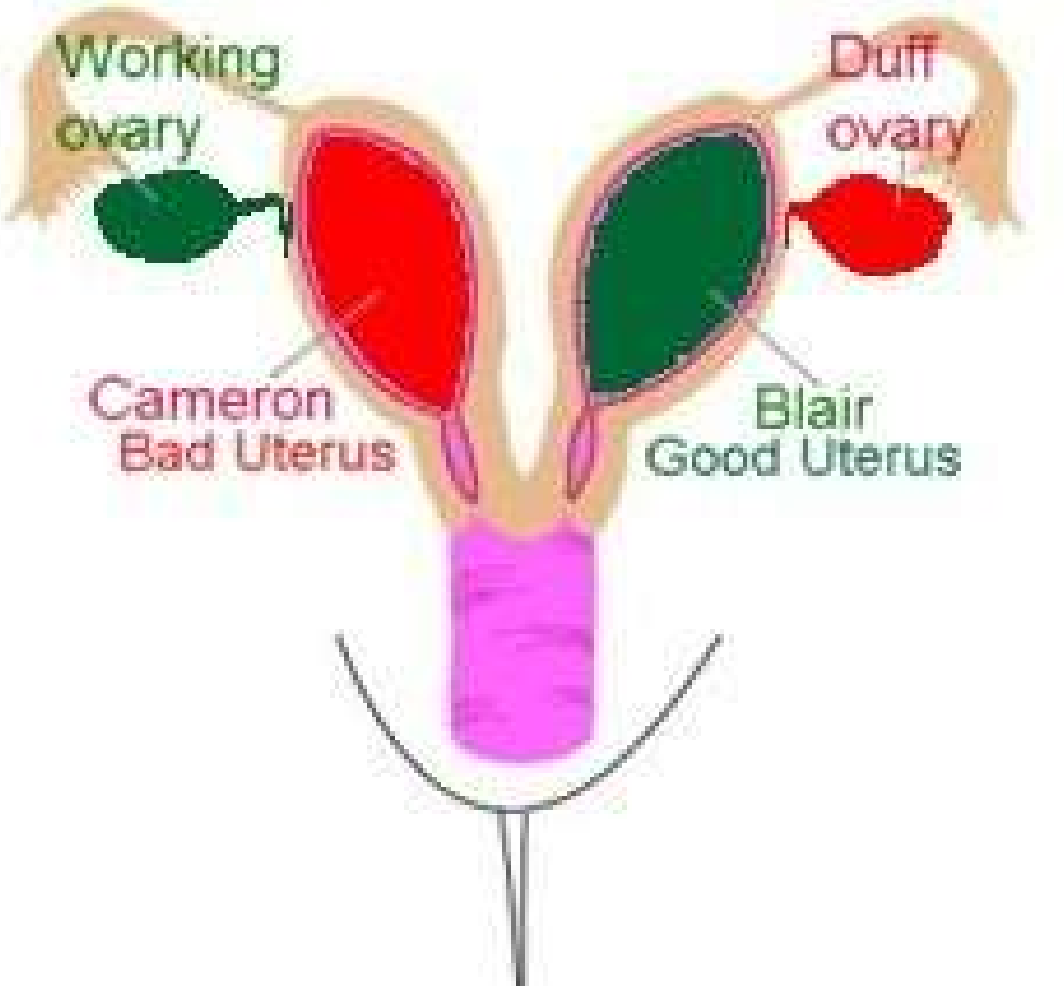
661. Матка, *uterus*, яйцеводы, *tuba uterina*, и яичники, *ovaria*, со связками; сзади

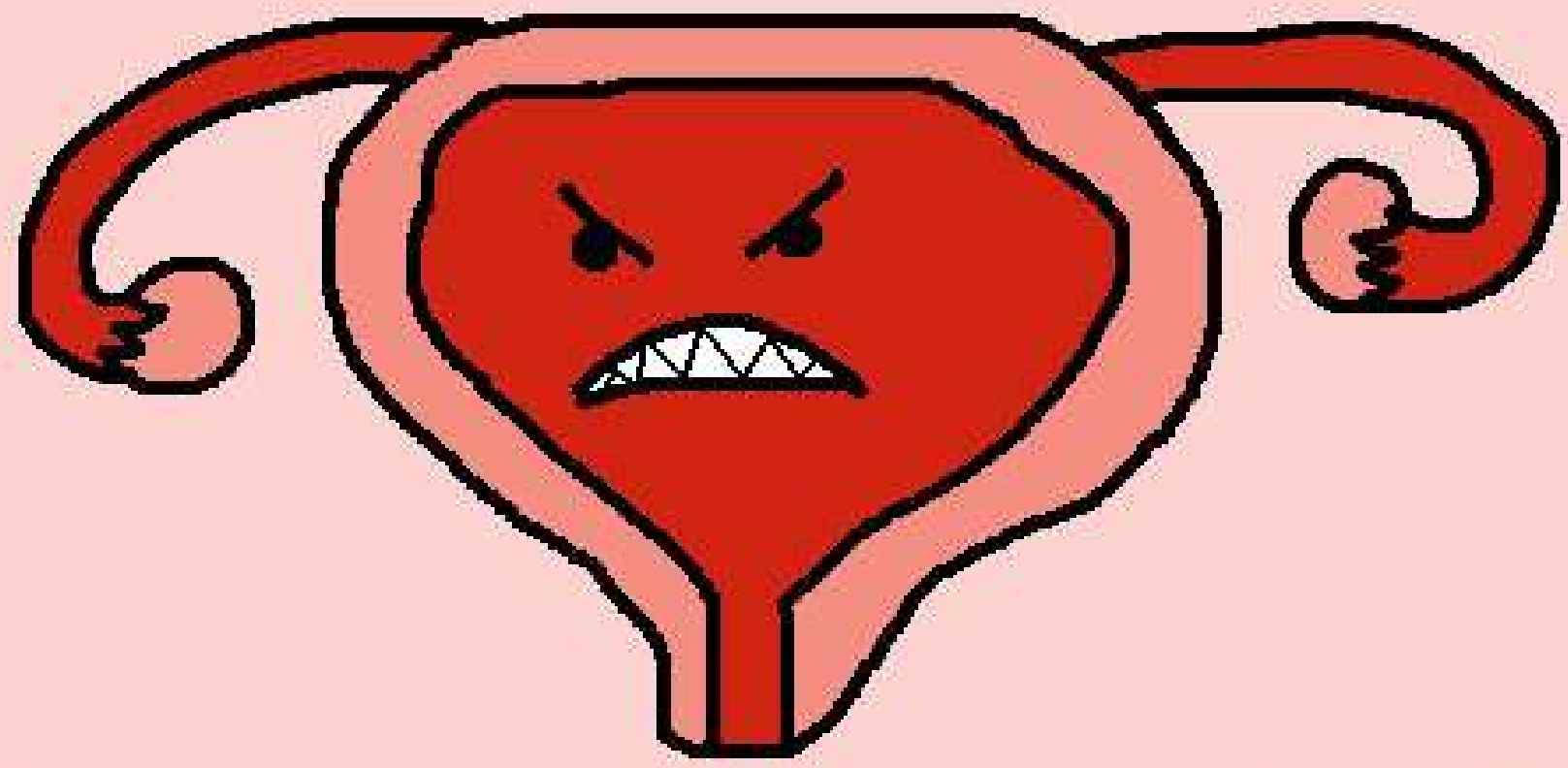


Female Reproductive Tract and Ligaments

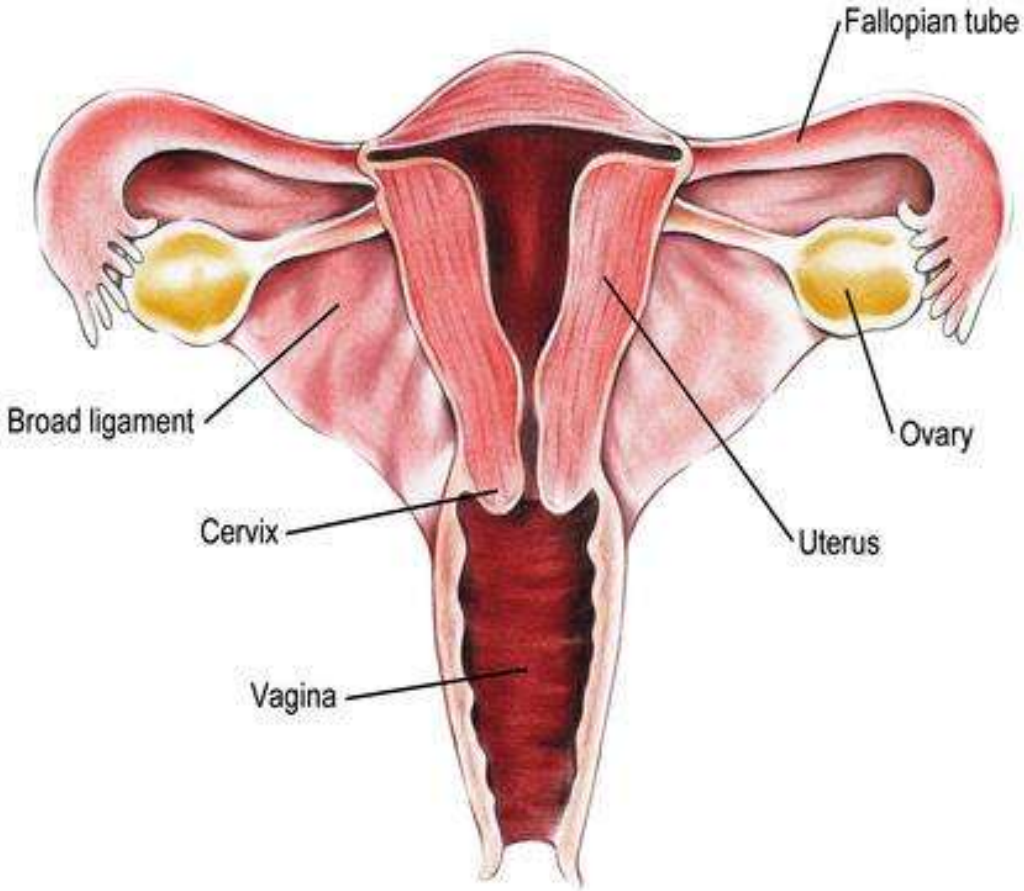



Lig. suspensorium ovarii
(Lig. infundibulopelvicum)
Fimbrien
Lig. ovarii proprium
Mesovarium
Epoophoron
Paroophoron
Corpus
uteri
Lig. teres uteri
(Lig. rotundum)
Cervix
Fornix
Vagina
Gartner-Zyste

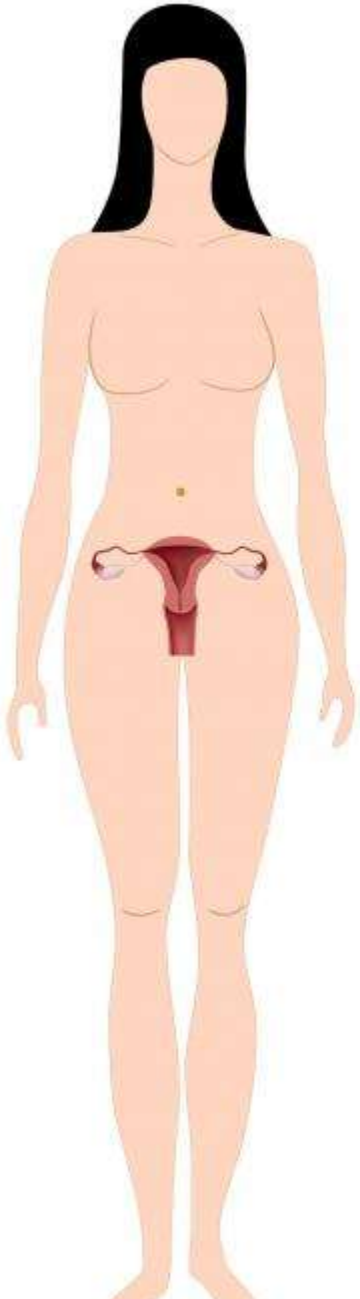

Working
ovary
Duff
ovary
Cameron
Bad Uterus
Blair
Good Uterus

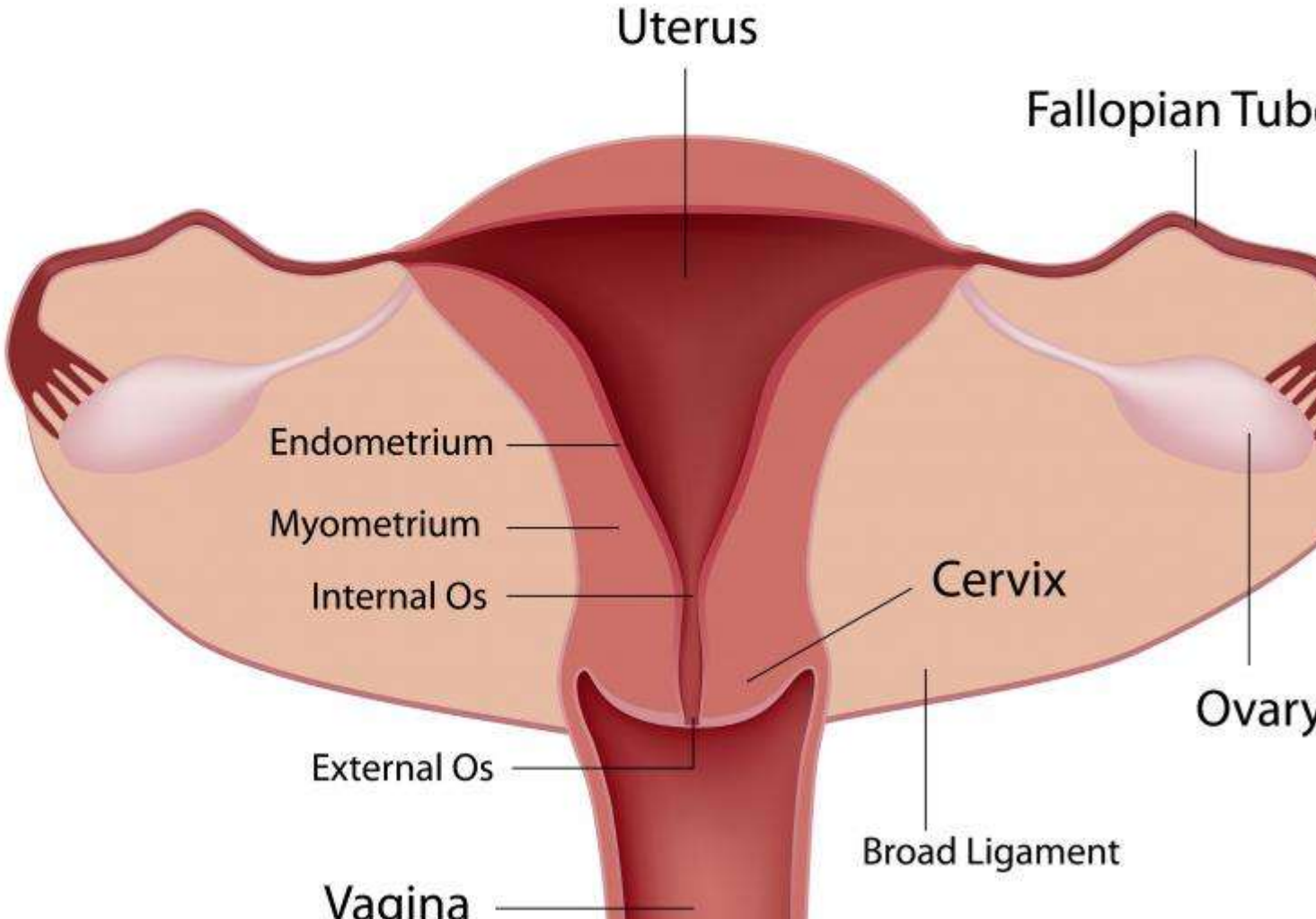


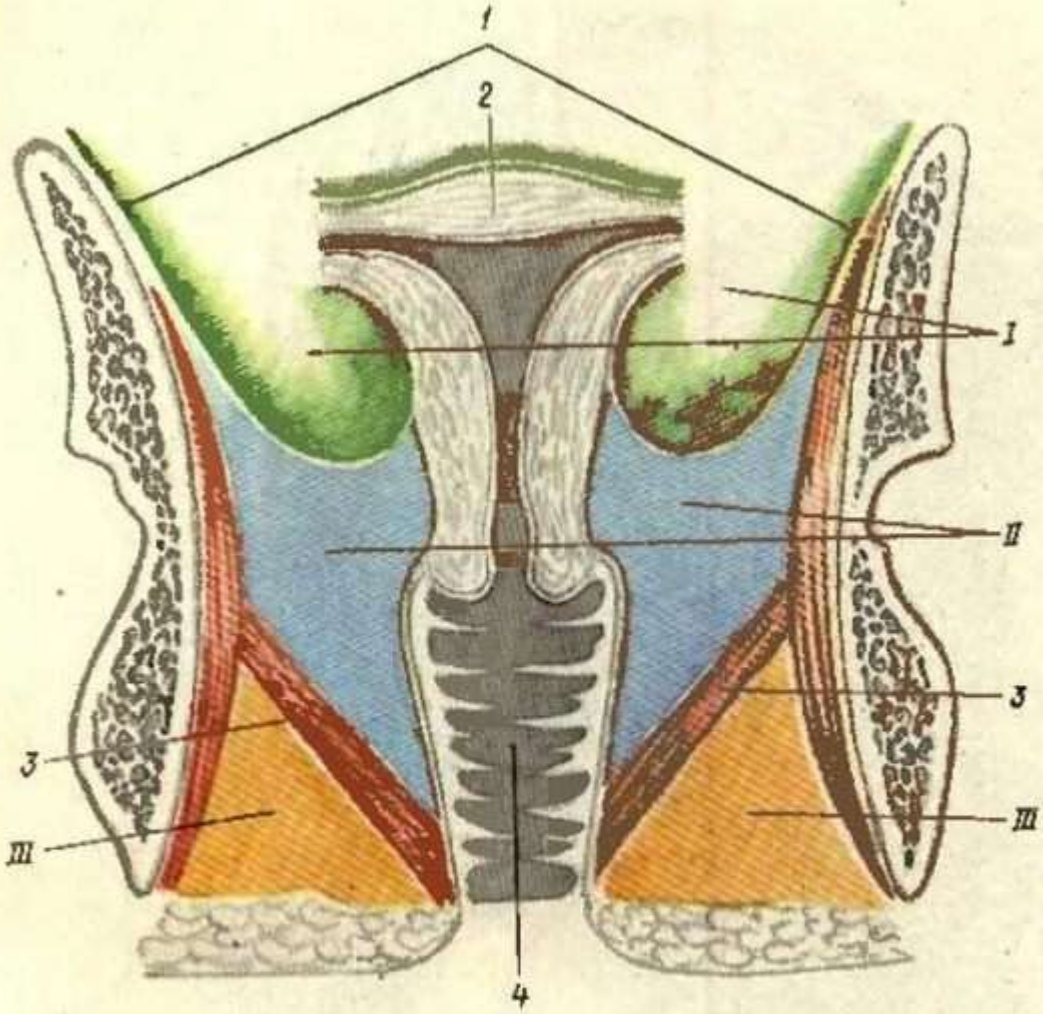
beware the wrath of
the female anatomy


Fallopian tube
Broad ligament
Ovary
Cervix
Uterus
Vagina

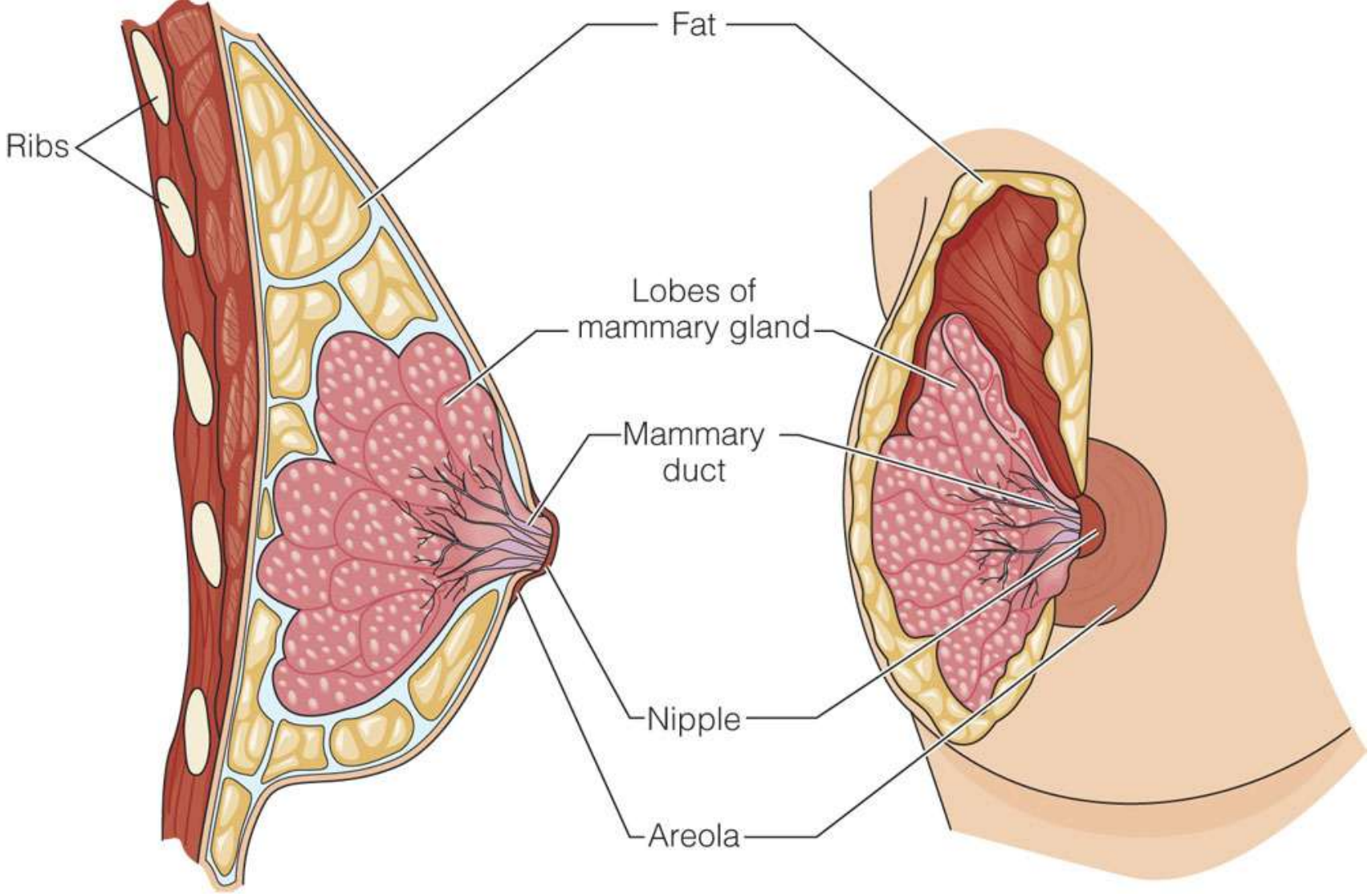
Female Reproductive System





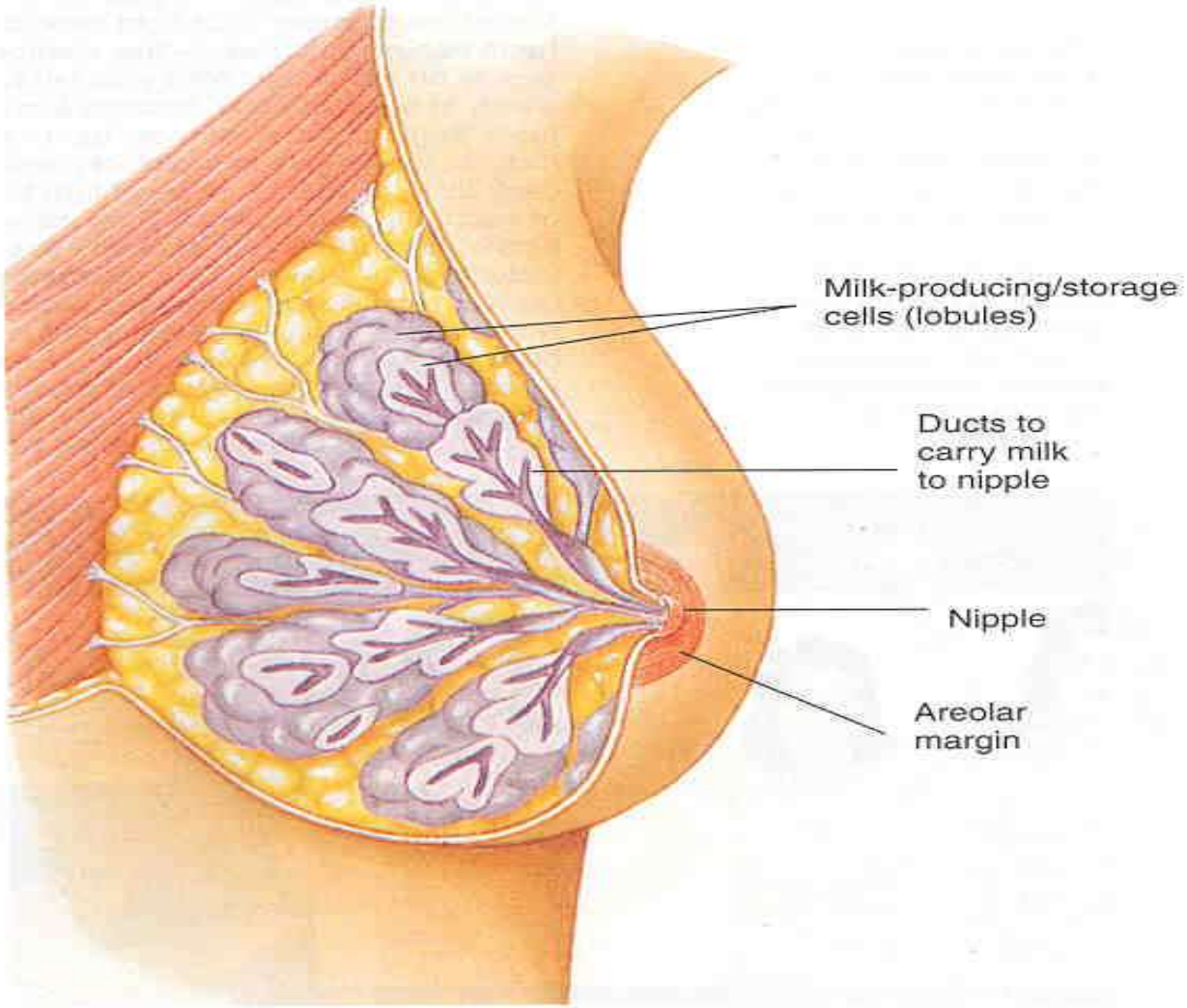


Этажи полости таза (схема фронтального разреза).
I — cavum pelvis peritoneale; *II* — cavum pelvis subperitoneale; *III* — cavum pelvis subcutaneum. *1* — брюшина; *2* — **матка** ; *3* — m. levator ani; *4* — **влагалище.**

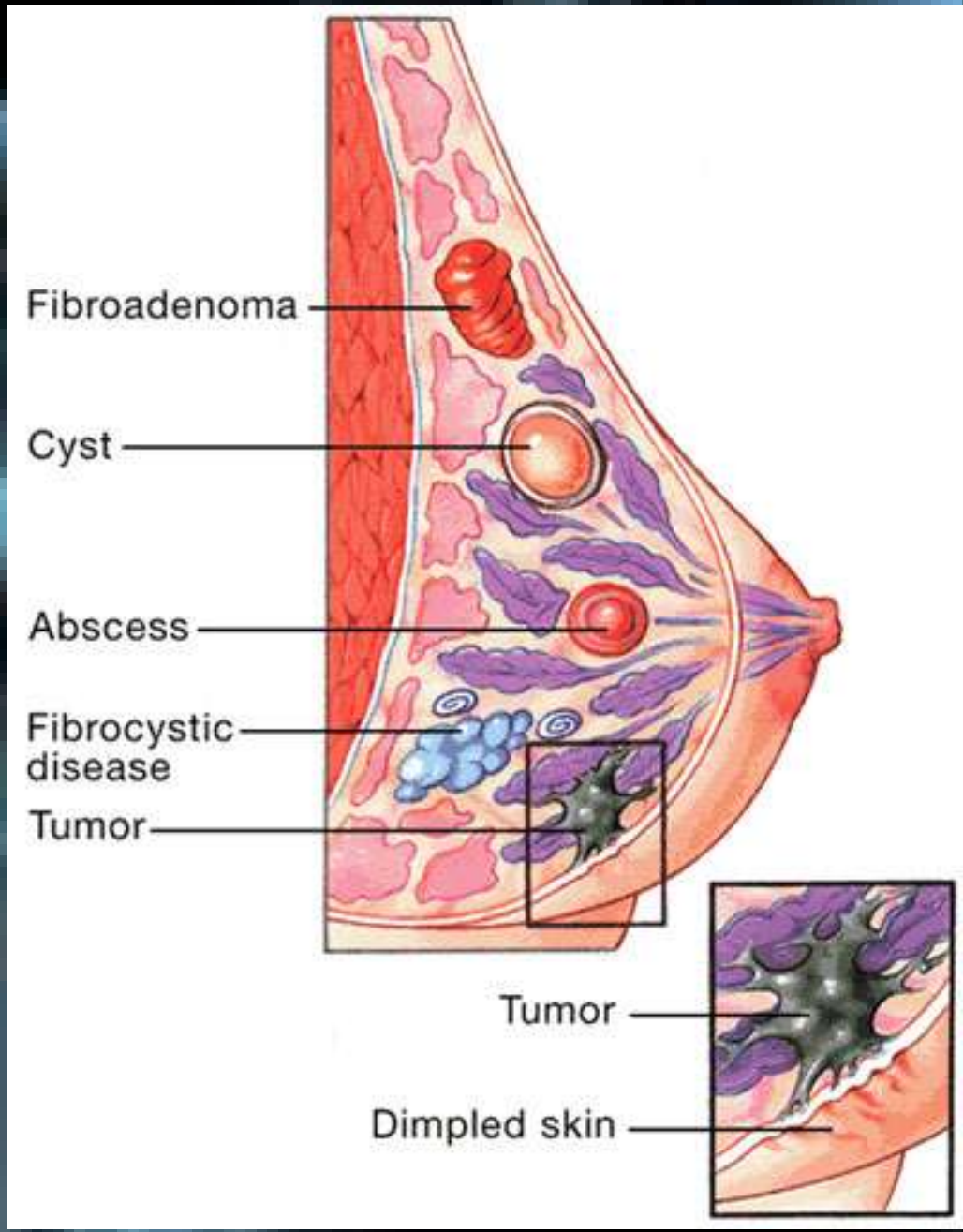


The female breast.

Breast(MAMMA)

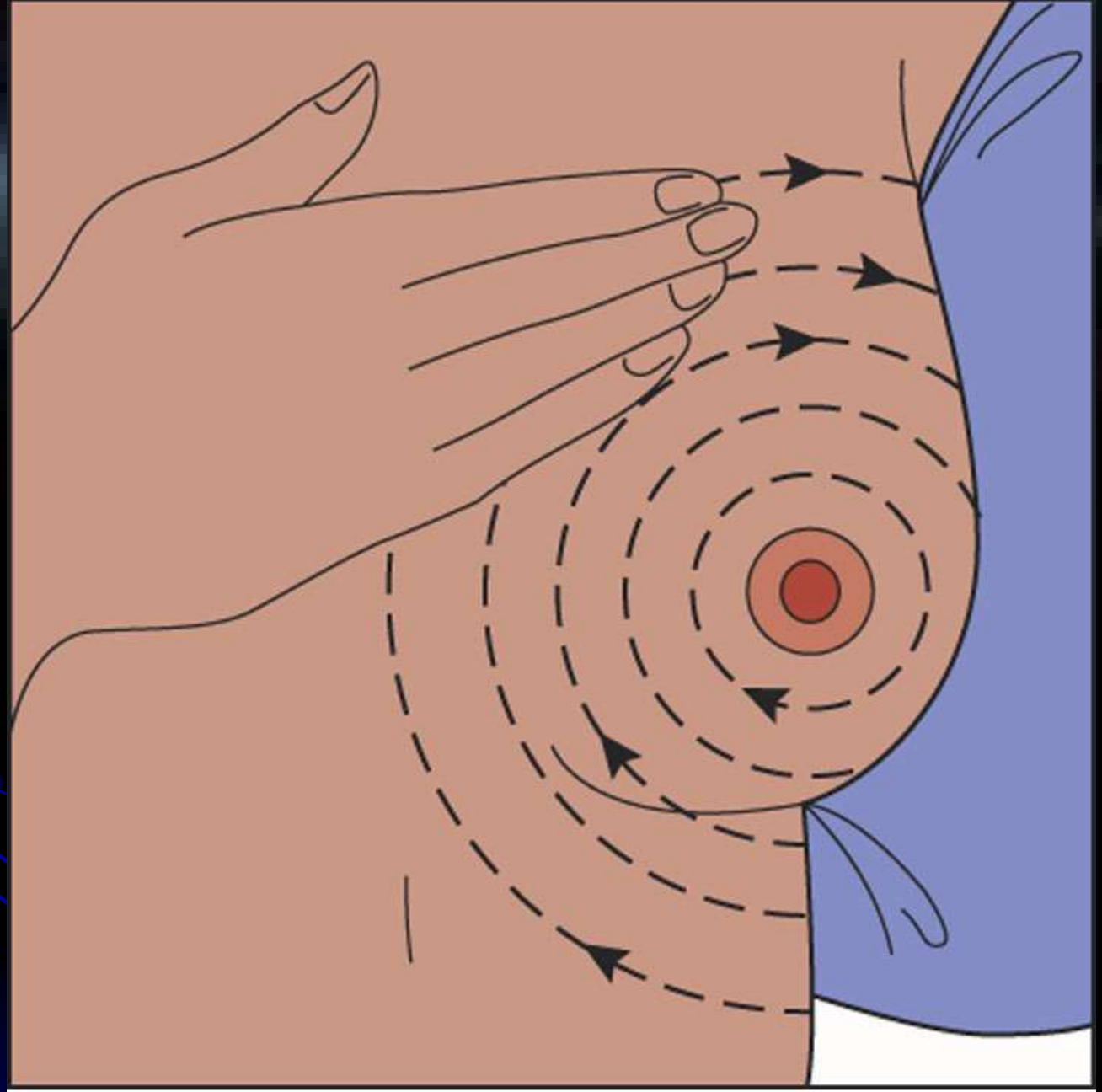


- American Cancer Society recommends SBE
- Self breast at the end of your period every month for adult women



Performing A Breast Self Exam

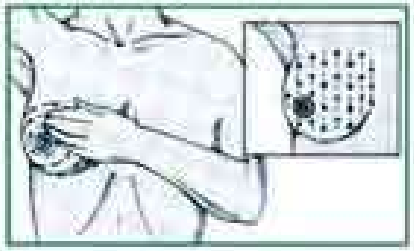
- First, *look* for changes…Then, *feel* for changes
  - ❖Step 1: Lie down and raise right arm above head
  - ❖Step 2: Examine area from underarm to lower bra line; across to breast bone; up to collar bone; back to armpit
  - ❖Step 3: Use pads of three middle fingers of the left hand to check the right breast, in dime-sized circles



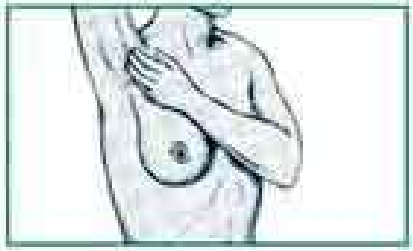
Breast exam (in Feature box)

Breast Cancer

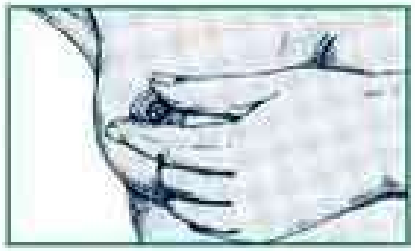
Breast Self-Examination



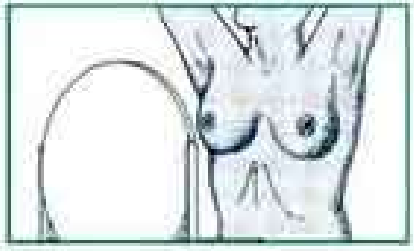
Feel your breasts for lumps. (Use circles or rows.)

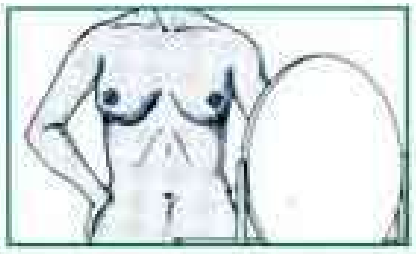


Also check under your arms, up to your collar bone, and below your breasts.



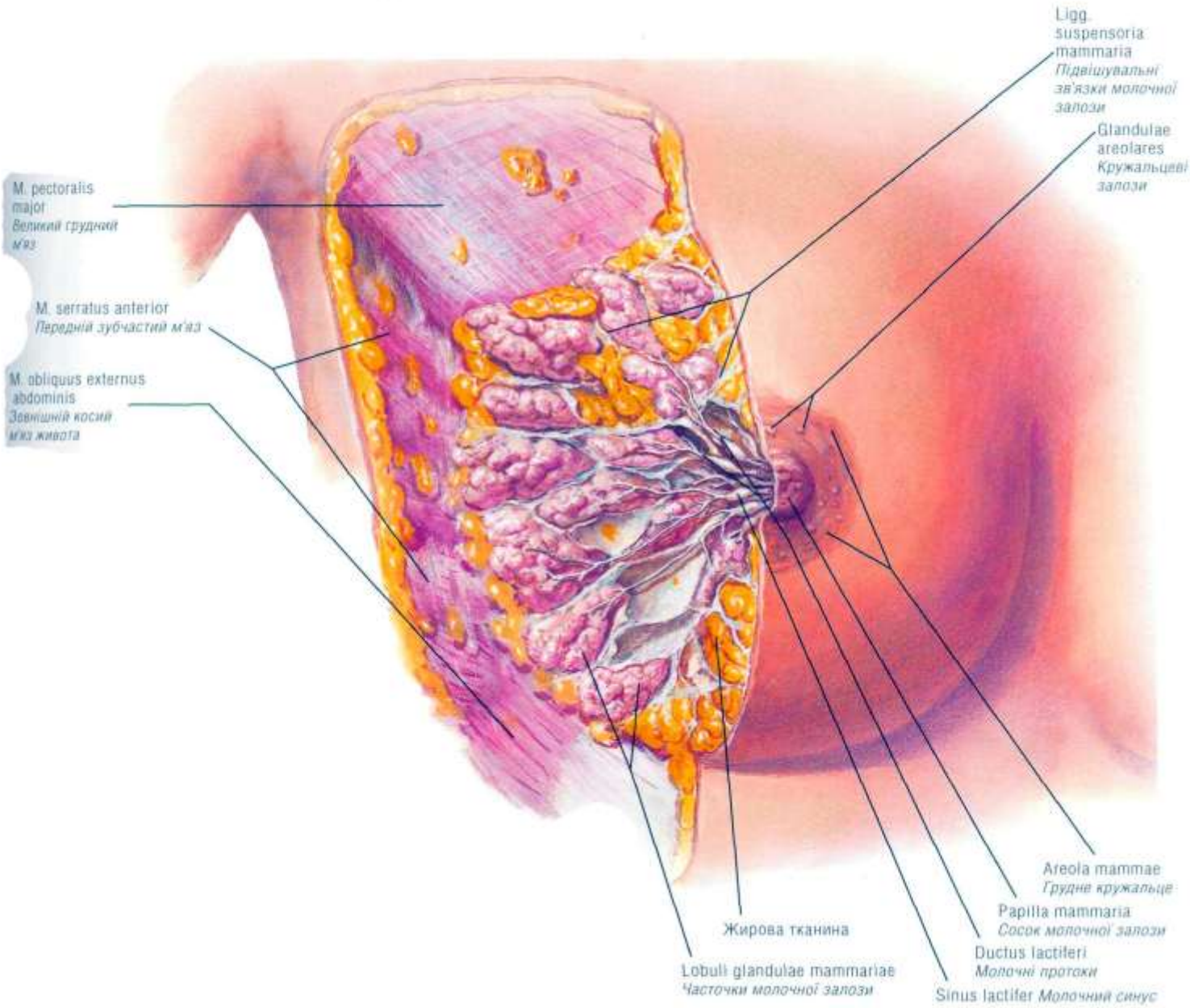
Look for any changes in your nipples.

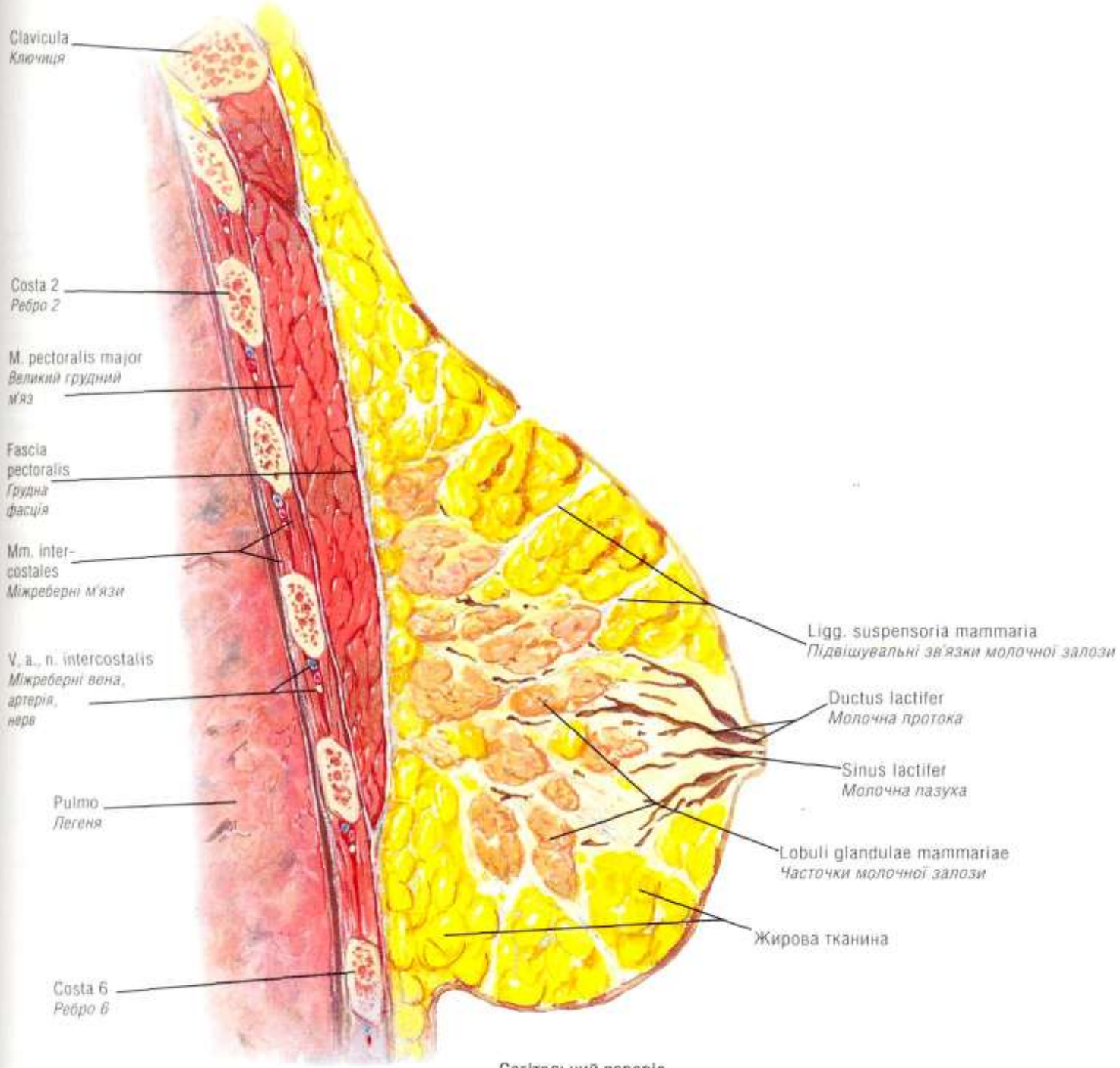




With your arms raised over your head, look for any changes (puckering, size/shape, redness, discharge) in your breasts. Then, put your hands on your hips and look again.

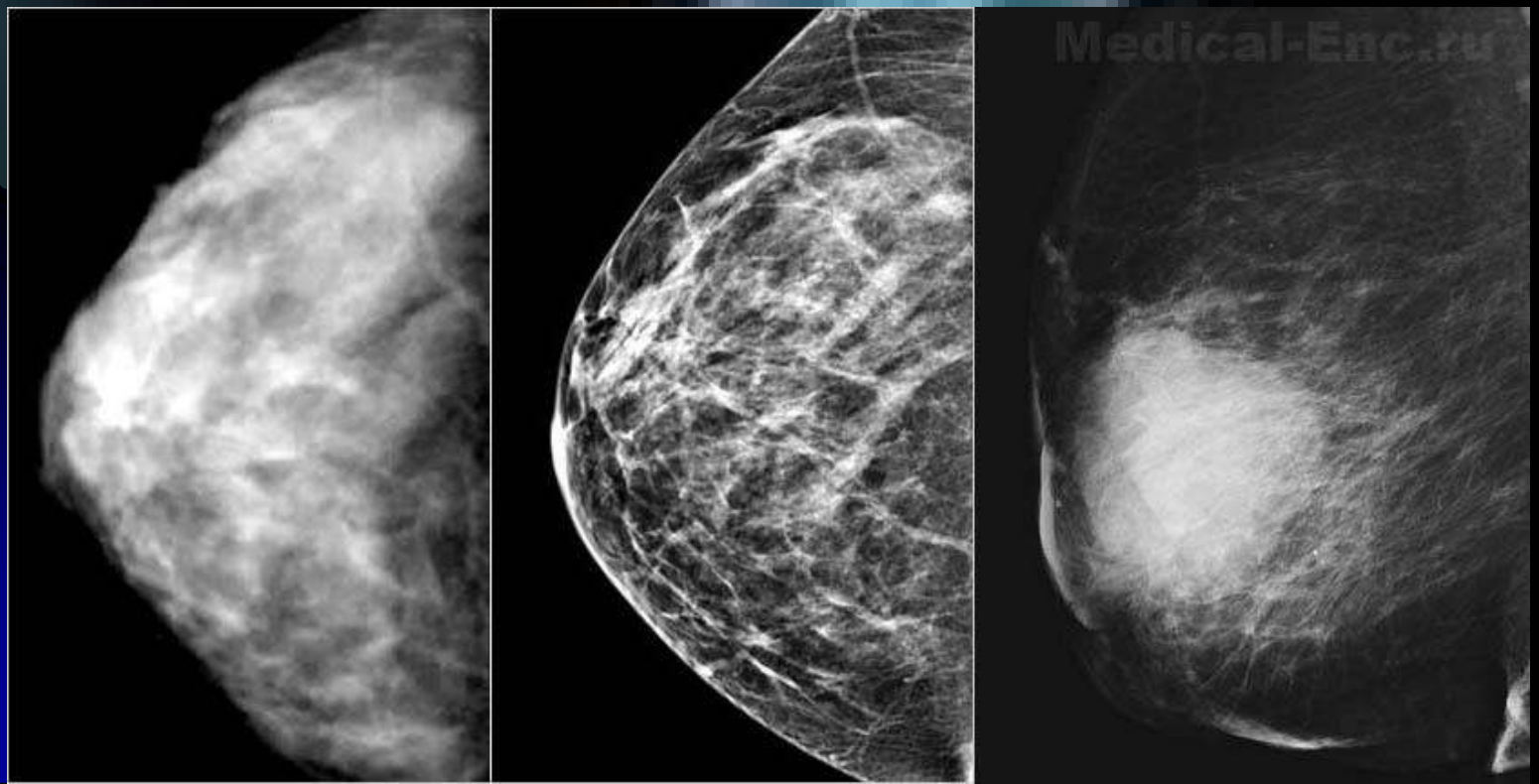
Молочна залоза (mamma)



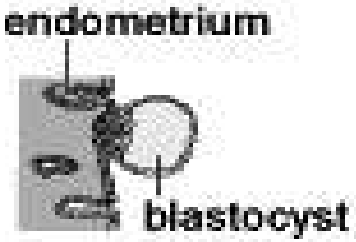


Сагітальний переріз

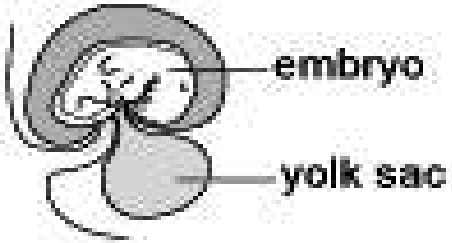
Breast is composed of identical tissues in men and women, that's why breast cancer sometimes is also occurs in men, but such cases are less than 1% of patients with this disease.



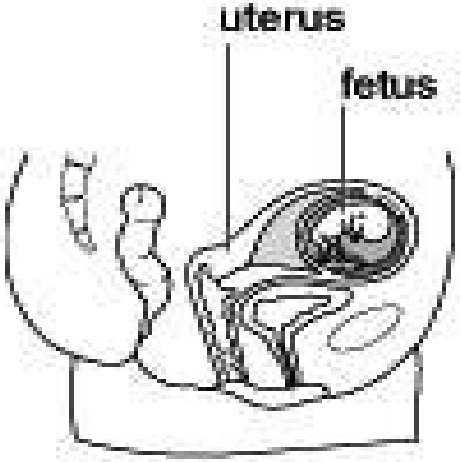
Inside the Womb



1 week (7 days)

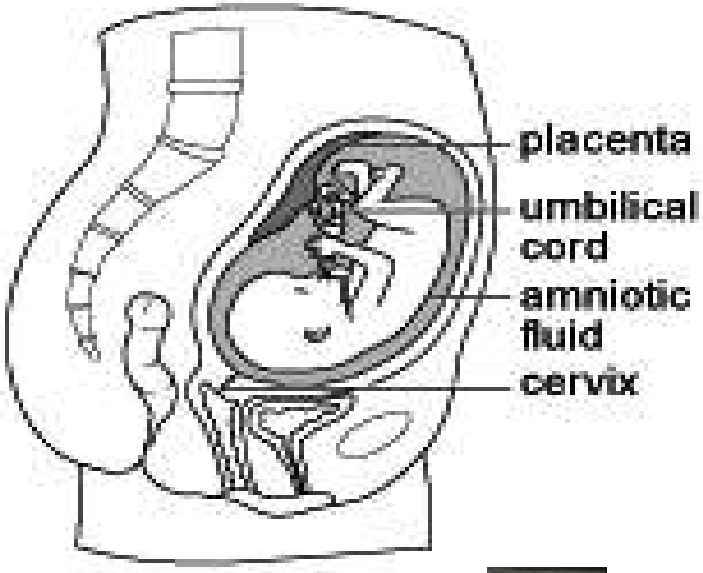


4 weeks (28 days)
7mm



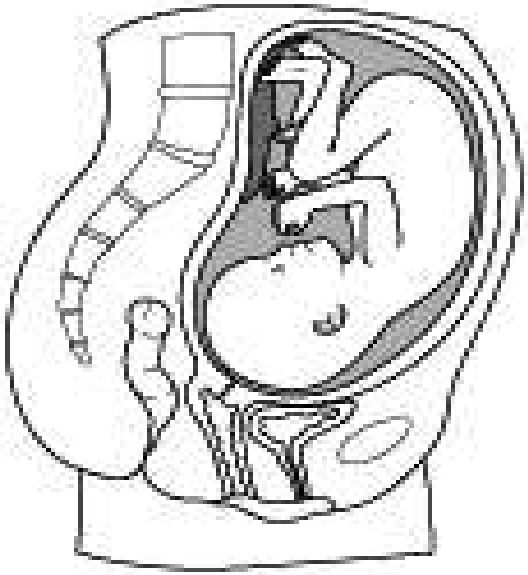
8 weeks (56 days)
40mm

First Trimester



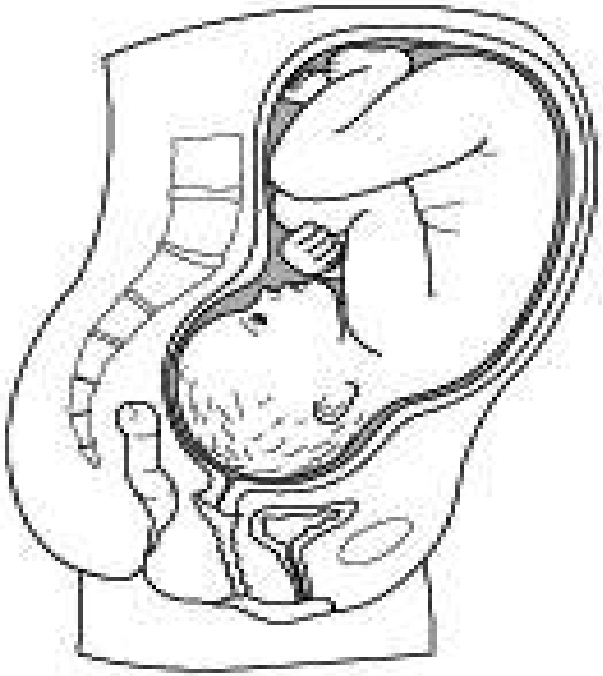
12 weeks (84 days)
100mm

Second Trimester



24 weeks (168 days)
330mm

Third Trimester



40 weeks (280 days)
550mm

First Trimester

- Pregnancy is counted in weeks, lasting 40 weeks from the first day of your last period. So you are actually only preparing for pregnancy during those first two weeks, until ovulation. For two more weeks many women do not know that they are pregnant, even though they may be hoping that they conceived this month.

- About the time your next period is due is when pregnancy tests begin to pick up the first traces of hCG in your urine or blood. A positive test can send you through a whirlwind of emotions, both positive and negative, no matter how long you've planned for pregnancy or if it's a pleasant surprise.

- The picture to the right is 5 days after conception.

Second Trimester

- **The second or middle trimester is the time of your life! Not only have most women ceased being nauseated, many feel a burst of energy and report feeling the best that they've ever felt. Because of the changes in the first trimester disappearing sexuality also peaks at this time as well for the majority of couples. Not having to be concerned with birth control or falling asleep as soon as your head hits the pillow opens a whole new realm for the couple.**
- **The baby is finishing it's development and at the end of this trimester she or he will begin to put more weight on. Major organ systems are functioning and fetal movement can be felt by mom and outside parties by the end of the second trimester. Some women will have ultrasound screening around 20 weeks gestation. About 50% of families will choose to find out the sex of their baby at this point as well.**

Third Trimester

- Baby is getting bigger and loving life in the womb. Many babies will start to settle into a head down position, beginning as early as the 28th week.

- About 3-4% of all babies will remain in the breech position at the end of pregnancy. This final trimester is really a time for finishing touches like lung maturity and layers of brown fat to help keep your baby warm on the outside.


Thank you!